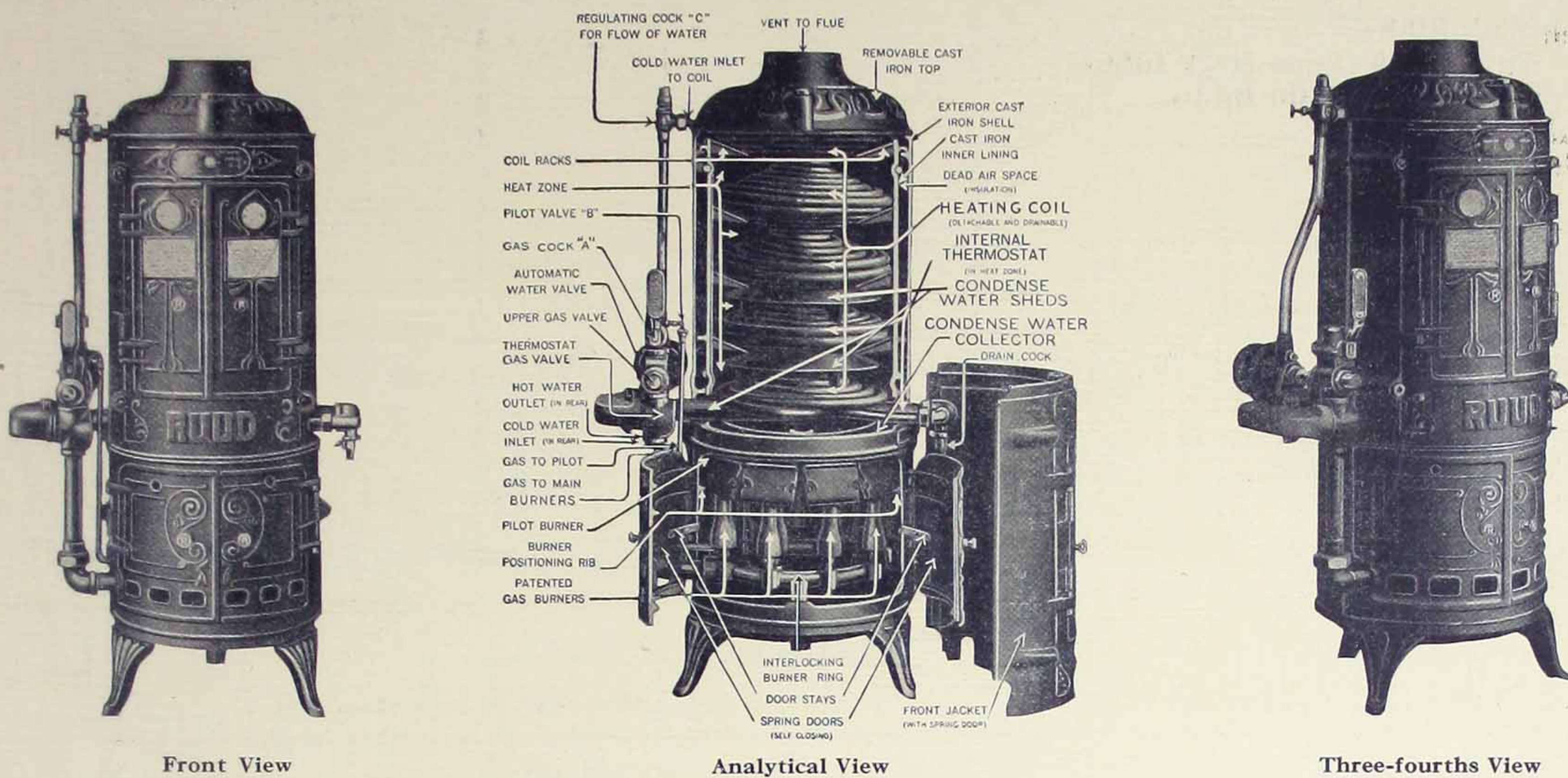


## RUUD AUTOMATIC GAS WATER HEATERS

(Instantaneous Type)



The Type F Heater, combining instant service, inexhaustible supply with the highest efficiency attainable, is to be preferred over any other type of heater where conditions favorable for its operation exist. Its operation is automatic, the gas being turned on or off by the flow of water in response to the opening or closing of the hot water faucets.

The **Ruud** Internal Thermostat built into each heater affords a secondary and absolute regulation of the gas in accordance with the temperature of water, by operating a secondary gas valve entirely separate from that operated by the water flow. Besides delivering water at a uniform set temperature, which may be at any degree desired, this device gives great economy in gas consumption, prevents overheating of the water, and insures absolute safety under any circumstances.

This regulation of the gas in proportion to the heat required by the water enables the heater to be installed under a "Re-Heating System," taking advantage of heat derived from your furnace, boiler, coal range, etc.. Installed this way, the heater simply adds to the water flowing through it the heat necessary to bring the water to the desired temperature.

### SIZES OF HEATERS—THEIR APPLICATION TO RESIDENCES

Type F Heaters are made in four sizes, as listed below, the size number corresponding to the capacity of the heater, raising the temperature of the water 63° F.

For quick service in determining the proper size of heater for residential use, we offer the following table, at the same time urging the use of the tables on page two giving capacities of the Heaters and Fixtures for complete installations.

Size Heaters	*Gals. per Min.	Residences having
No. 3	3	One bathroom and kitchen sink, small family.
No. 4	4	One family bathroom, one servants' bathroom, kitchen and laundry.
No. 6	6	Two family bathrooms, one servants' bathroom, kitchen, pantry, laundry, and one or two lavatories.
No. 8	8	Three or four family bathrooms, servants' bathroom, kitchen, pantry, laundry and lavatories.

\*These figures are approximate depending on the temperature of the incoming water.

For Apartments assume a need of three gallons per minute per bathroom, and specify a heater having two-thirds the capacity determined, as not more than two-thirds of the faucets will be drawing water simultaneously. Thus—an apartment house with four one-bathroom apartments would need twelve gallons per minute. A No. 8 Heater would answer this requirement.

Issued by  
**Ruud Manufacturing Company, Pittsburgh, Pa.**  
 Branches Everywhere

*This sheet is furnished for the files of Architects and conforms to the size recommended by the American Institute of Architects.*

1. Ruud Automatic Water Heaters (Instantaneous Type).
2. Ruud Automatic Water Heaters (Collage Instantaneous Type).
3. Ruud Automatic Storage Systems for Domestic Use.
4. Ruud Multi-Coil Automatic Storage Systems.
5. Ruud Tank Water Heaters.



## Gallons per Minute Delivered by Ordinary Plumbing Fixtures

While compiled from actual tests, this table is not guaranteed, as fixtures even of the same manufacture vary somewhat, and the flow is affected by many variable factors.

Fixture	Fair Flow	Good Flow	Excellent Flow
Kitchen Sink Bibbs.....	2	4	6
Pantry Sink—High Goose Neck Bibbs.....	2	2	3
Pantry Sink—Large Plain Bibbs.....	4	6	8
Vegetable Sink Bibbs.....	2	4	6
Laundry Tray Bibbs.....	4	6	8
Slop Sink Bibbs.....	3	4	6
Lavatory Basin Bibbs.....	2	3	4
Bath Tub Bibbs.....	3	4	6
Shampoo Spray.....	$\frac{1}{2}$	1	2
Liver Spray.....	1	2	3
5" Rain Head Shower.....	2	3	4
6½" Rain Head Shower.....	2	3	5
8" Rain Head Shower.....	4	6	8
8" Tubular Head Shower.....	6	8	10
Needle Baths.....	20	30	40
Manicure Tables.....	1	1½	2

## Capacities

in gallons per minute delivered by RUUD Instantaneous Automatic Water Heaters:

Size of Heater	Temperature Raise										
	50°	60°	70°	80°	90°	100°	110°	120°	130°	140°	150°
3	3.78	3.15	2.70	2.36	2.10	1.89	1.72	1.58	1.45	1.35	1.26
4	5.05	4.20	3.60	3.15	2.80	2.52	2.29	2.10	1.94	1.80	1.68
6	7.58	6.30	5.40	4.73	4.20	3.87	3.52	3.23	2.98	2.76	2.58
8	10.10	8.40	7.20	6.30	5.60	5.04	4.59	4.20	3.88	3.60	3.36

Type F Heaters are made in two designs, known as Standard Pressure Heaters and Low Pressure Heaters. Standard Pressure Heaters are designed to operate under water pressures exceeding twenty-five pounds to the square inch at the highest hot water outlet. Low Pressure Heaters are designed to operate where the water pressure at the highest outlet is less than twenty-five pounds and over five pounds per square inch. The No. 3 Heater is not made in the Low Pressure Type.

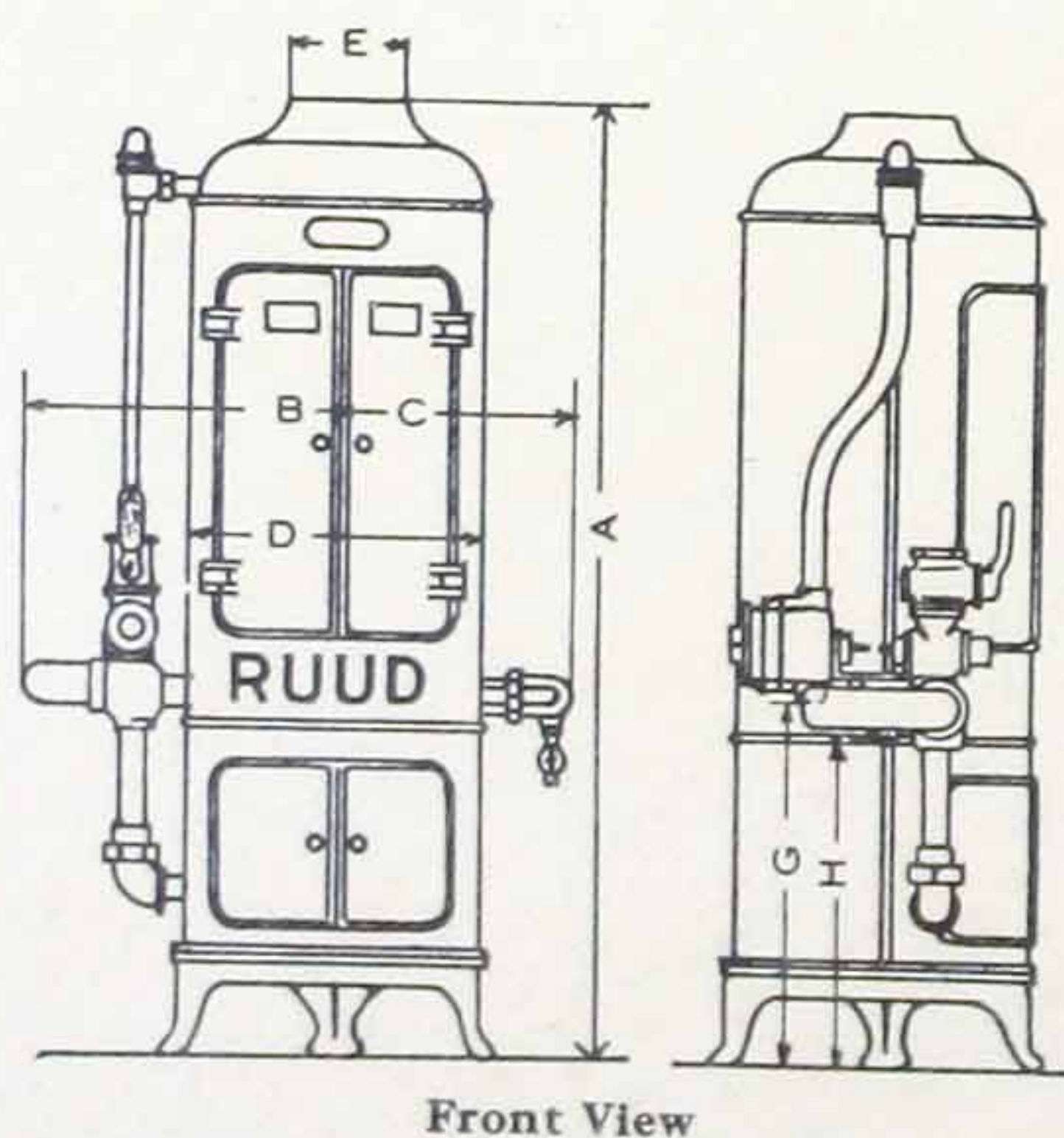


Table of Heater Dimensions

Size	A	B	C	D	E	G	H
No. 3	45½"	14¾"	11"	14½"	6"	20¼"	19"
No. 4	47¼"	15⅞"	12"	16⅜"	6"	20¼"	19"
No. 6	55½"	17¼"	13⅜"	19"	7"	22"	20⅞"
No. 8	58½"	18⅜"	14"	21¼"	8"	22"	20⅞"

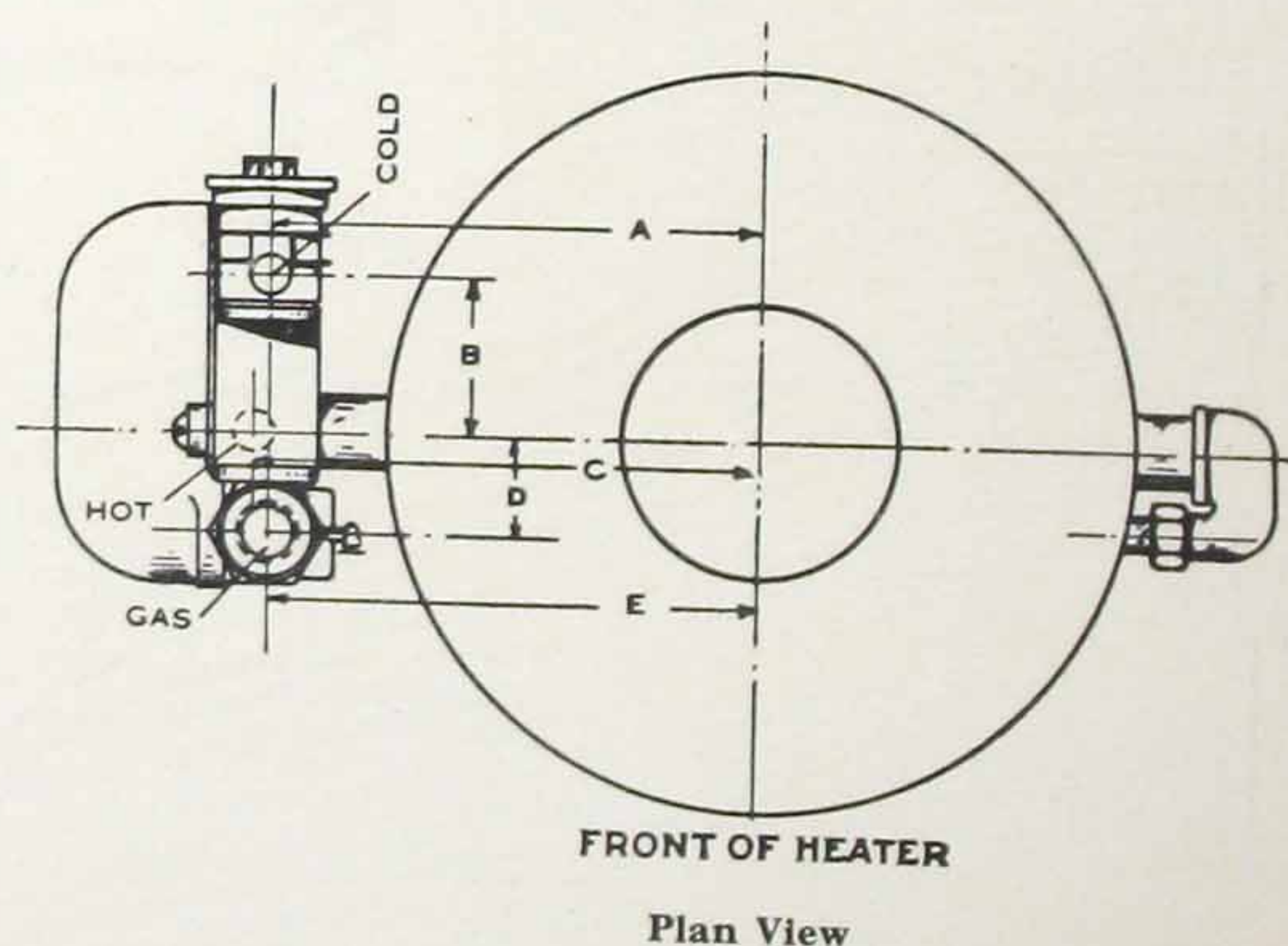
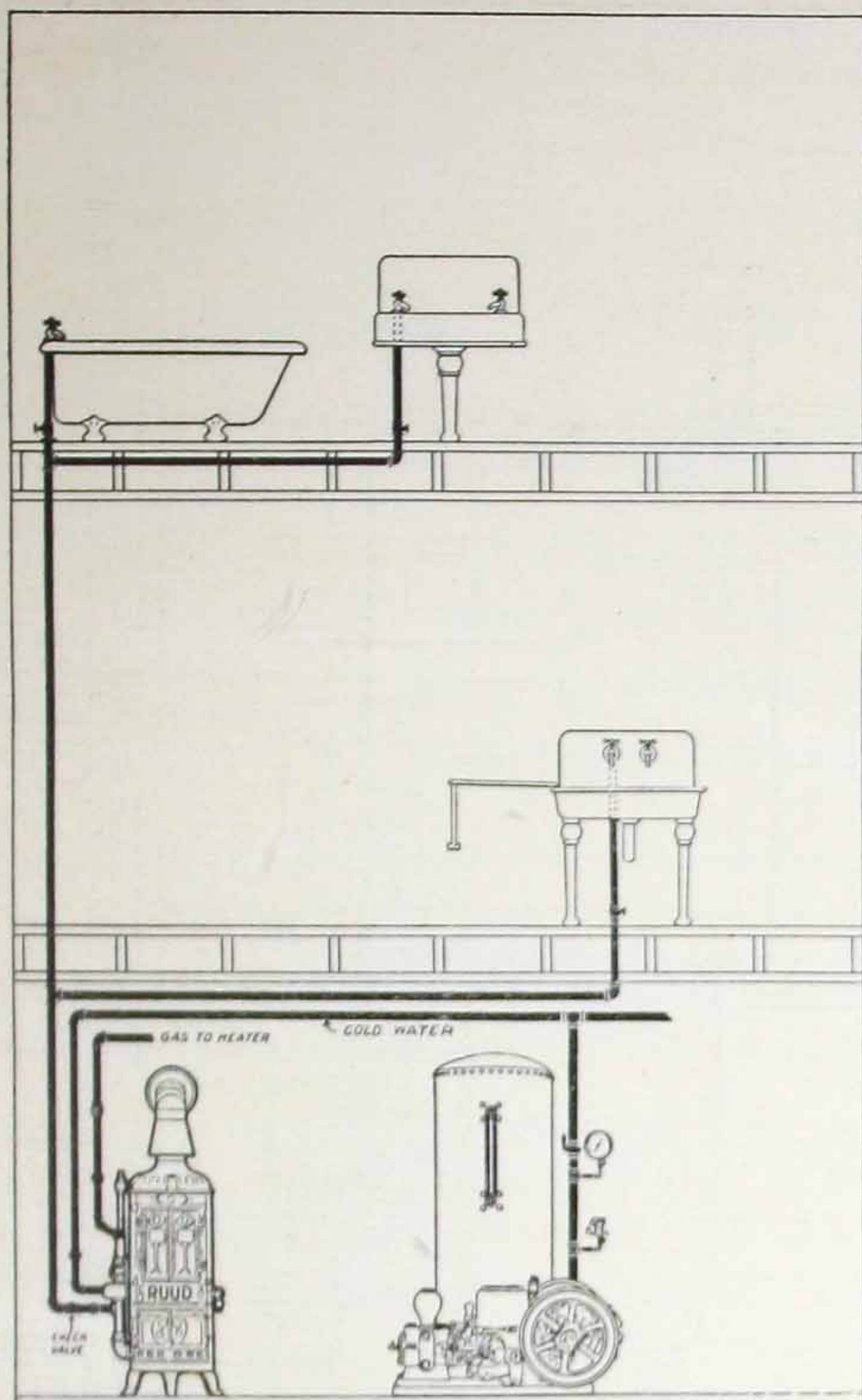


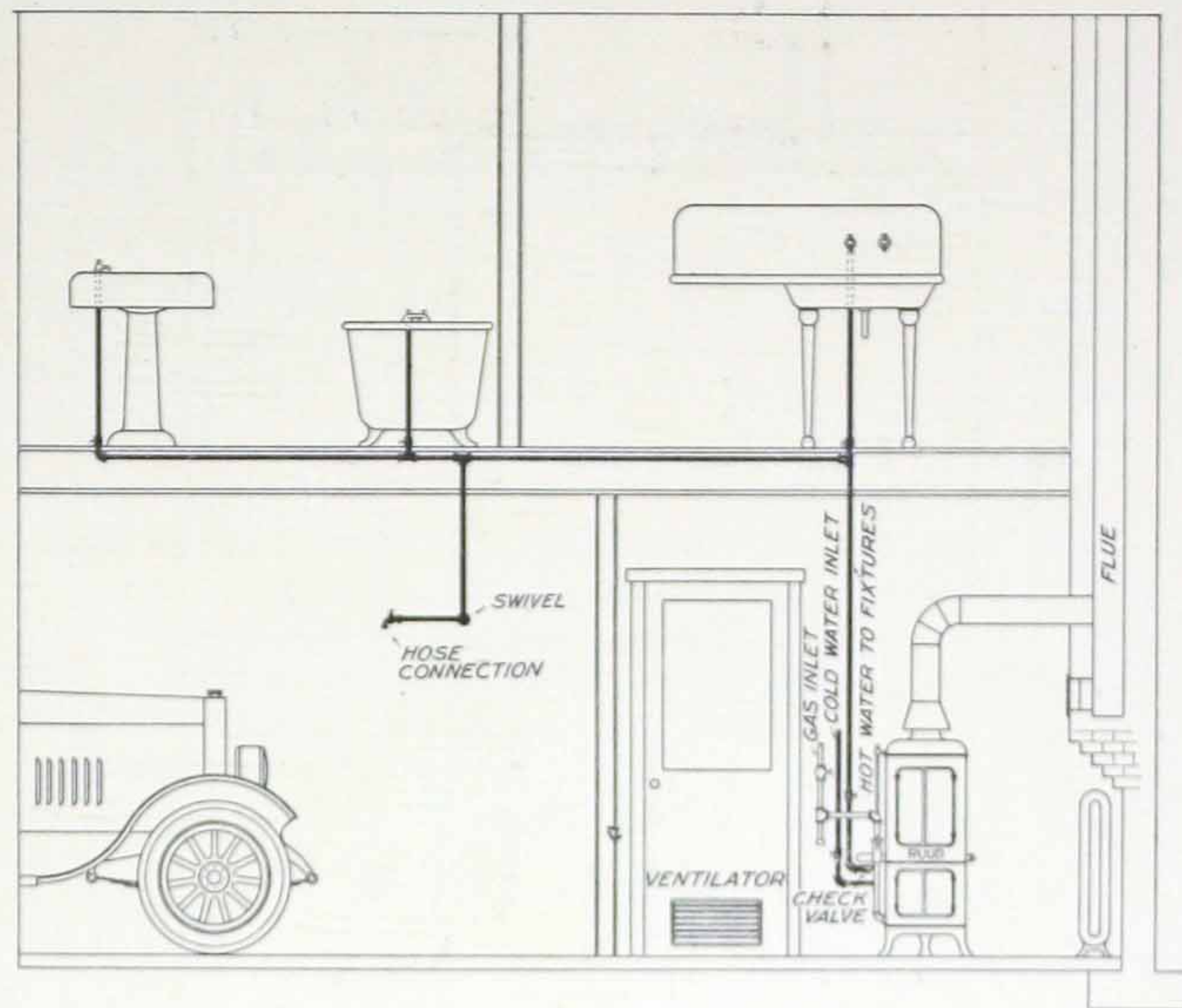
Table of Roughing-In Measurements

Heater	A	B	C	D	E
No. 3	10"	3½"	10⅝"	2¼"	10"
No. 4	10⅞"	3½"	11"	2¼"	10⅞"
No. 6	12⅜"	3½"	12⅝"	2⅜"	12⅜"
No. 8	13¾"	3½"	14"	2⅜"	12¾"

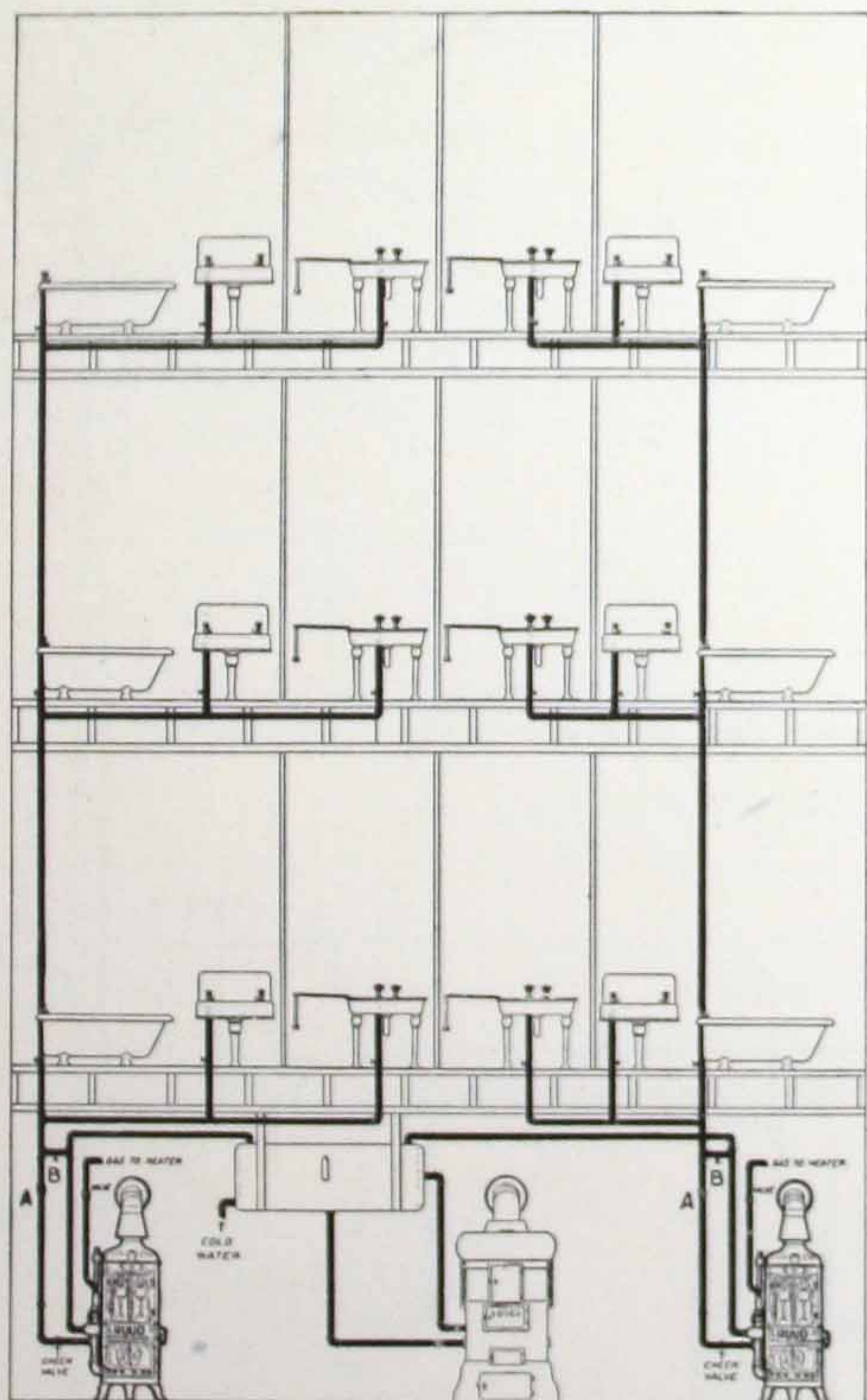




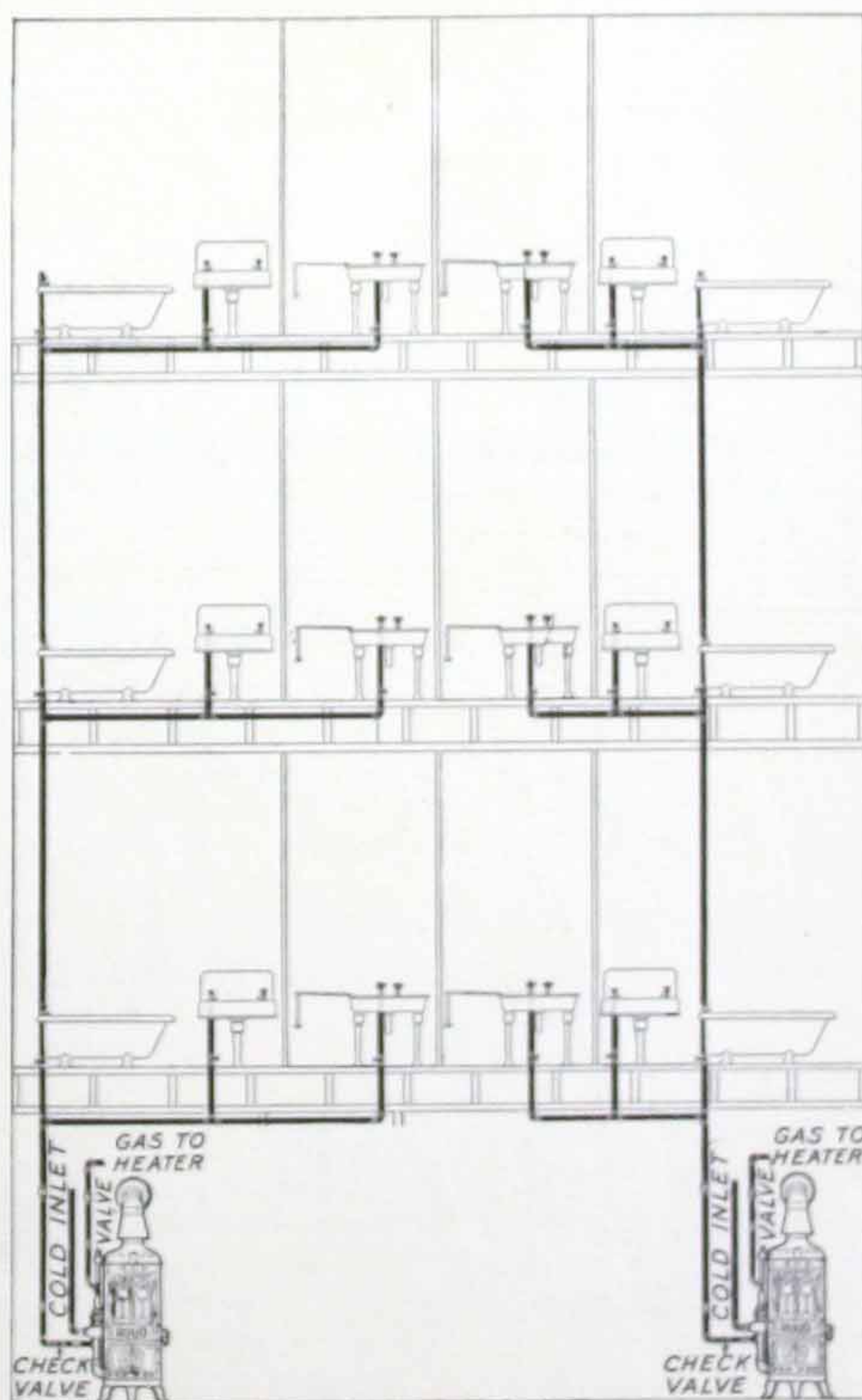
The Ruud installed on direct system of plumbing, water supplied under pressure of pneumatic tank



The Ruud installed in a private garage, supplying hot water for usual garage purposes, also to apartment above garage

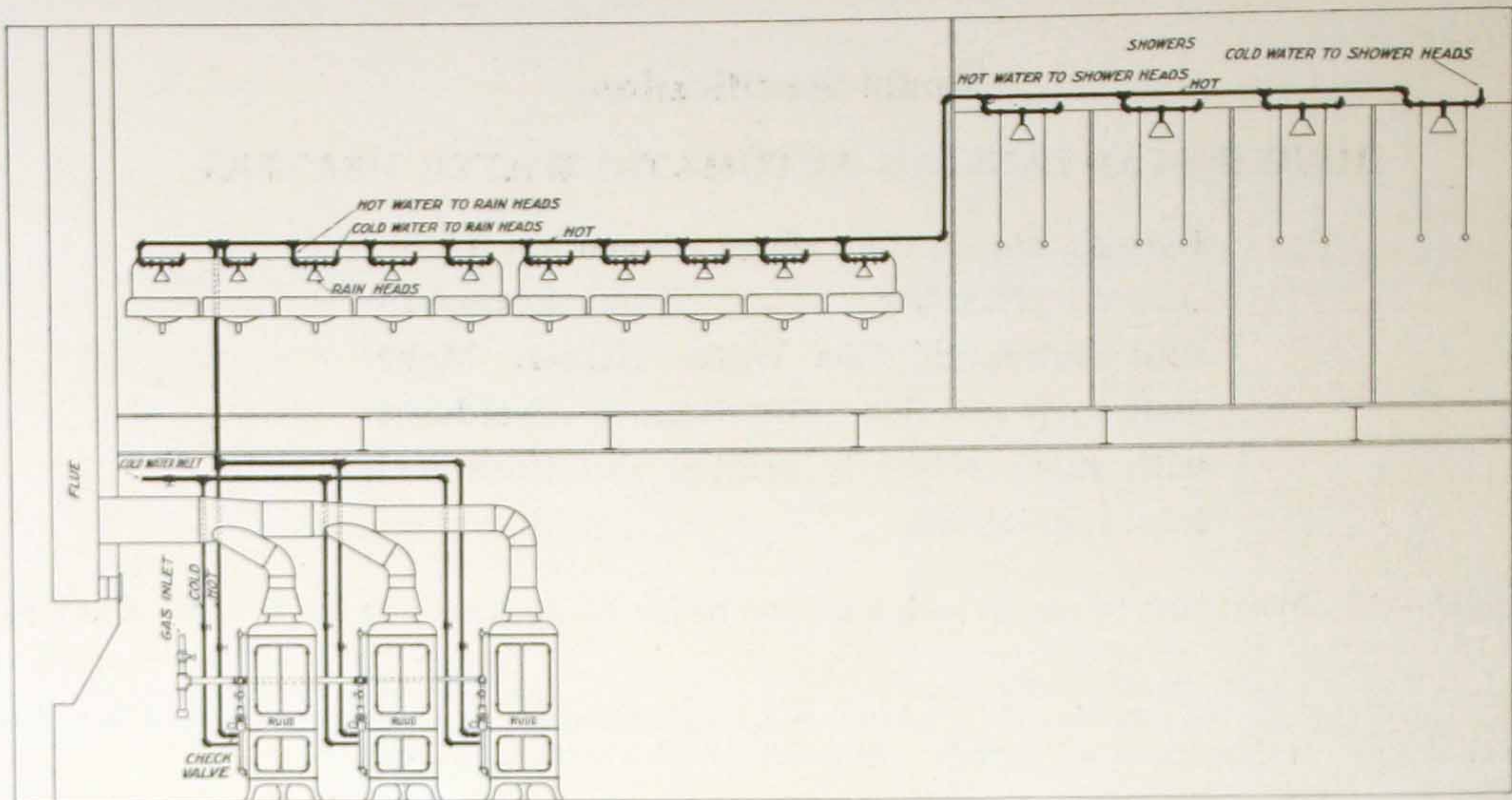


Two Ruuds installed on Re-heating system in six-apartment building, working in connection with boiler heated by coil installed in the house heating plant

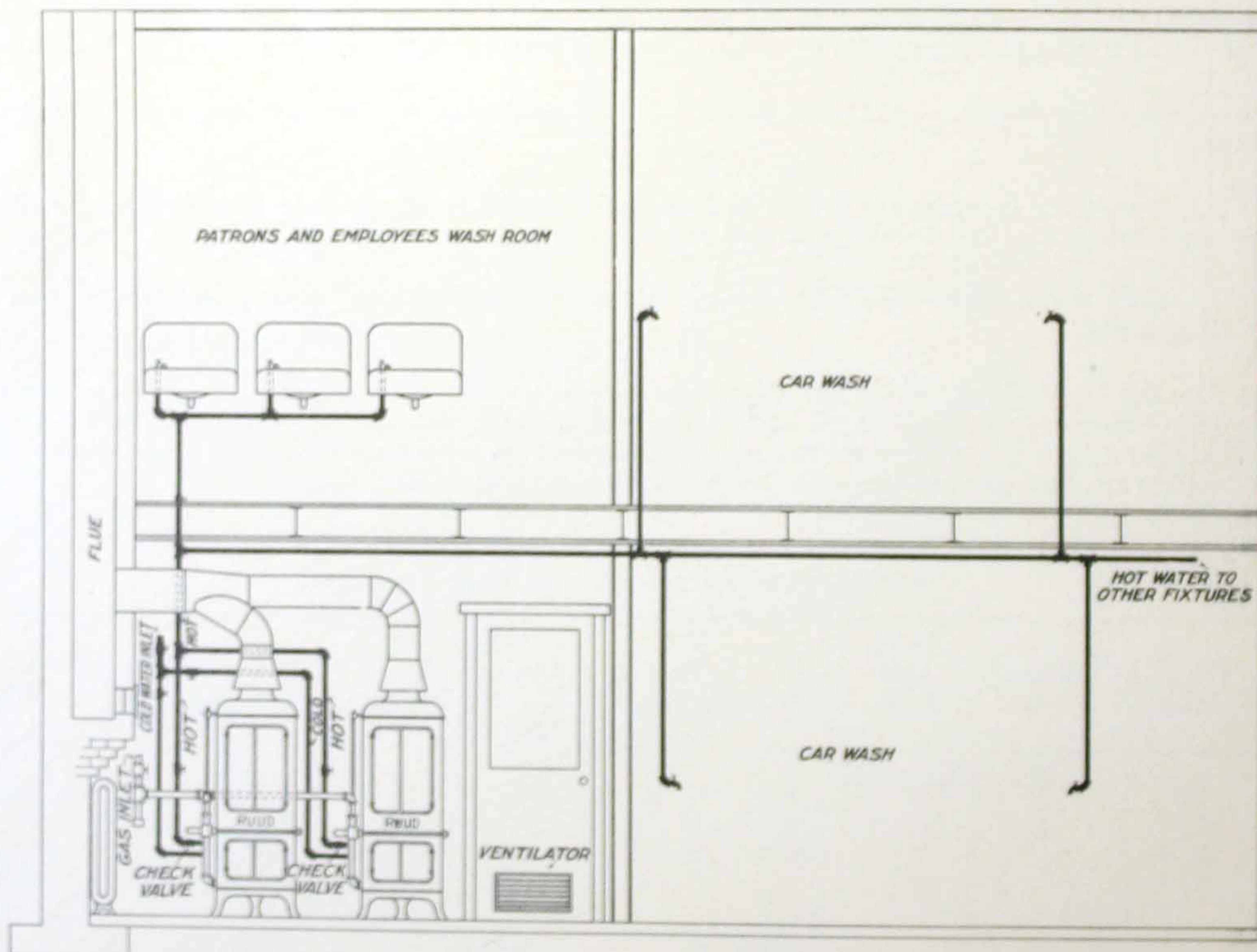


Two Ruuds installed in six-apartment building, each supplying three apartments





Battery of Ruuds installed in factory to supply hot water for showers and lavatories

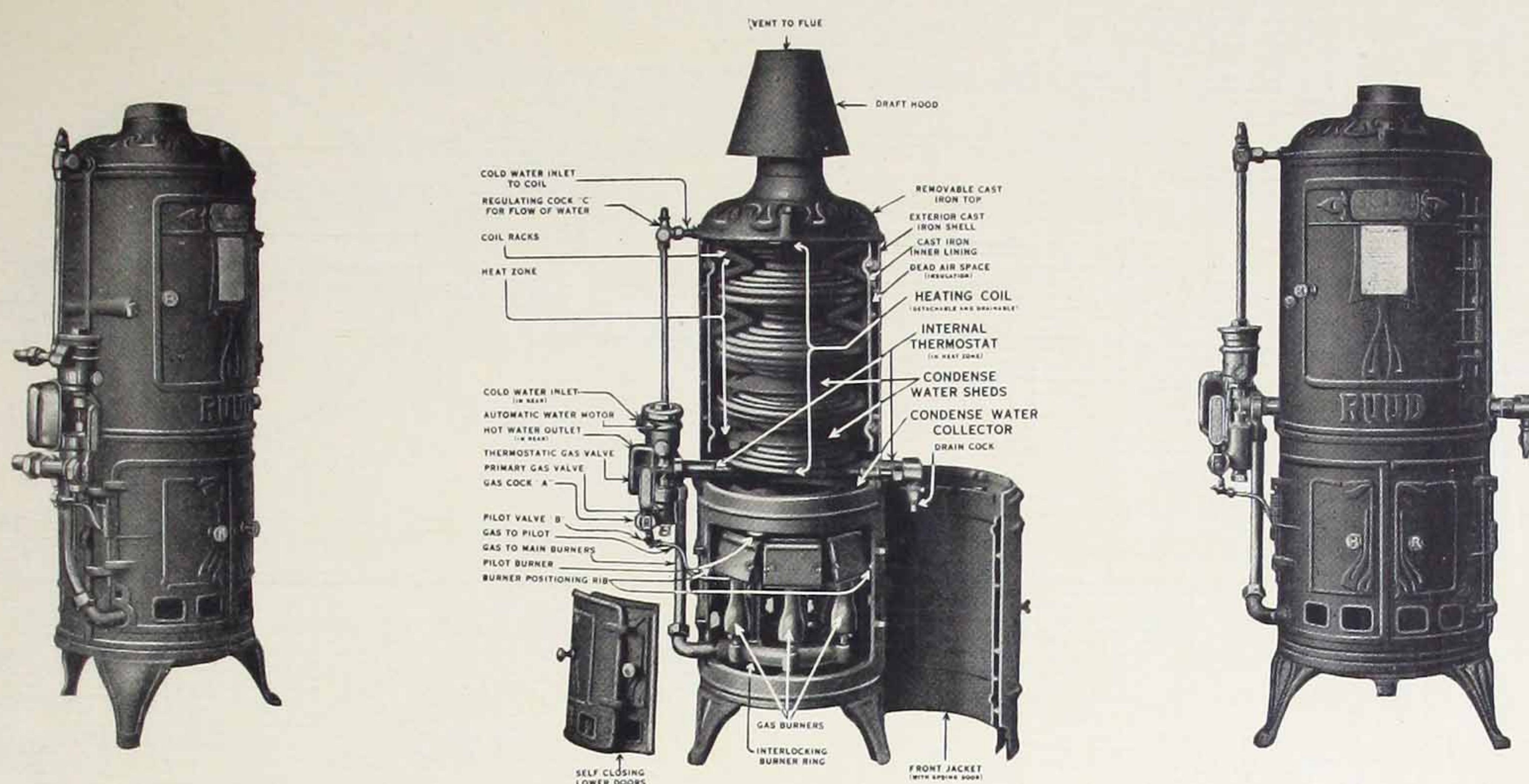


Battery of Ruuds installed to supply hot water in public garage for lavatories and car washing



## RUUD AUTOMATIC GAS WATER HEATERS

### *Cottage Instantaneous Type*



Ruud Automatic Gas Water Heaters (cottage instantaneous type) are specially built for the small home, and for it render an ideal service.

In design and construction, and in manner of operation, the Ruud 85 and 95 differ in no way from Ruuds of larger, standard size. Quality is the same, which in itself is a guarantee of a long, trouble-free life. The operation of the heater is entirely controlled at the faucet, its opening or closing controlling the gas flow. Secondary fuel control is afforded by the Ruud Internal Thermostat. Each control is separate and distinct and operates its own individual gas valve, rendering the heater safe under all circumstances.

The modern small home is a compact structure of minimized floor space and short pipe runs. Hot water demands are small and intermittent, a condition that is ideally met by the intermittent, ever-ready service of the Ruud 85 and 95.

Not only in the small home, but in stores, shops and offices, in fact, in every place requiring small quantities of instant hot water, the Ruud 85 and 95 will furnish a hot water service that is perfect in every particular.

### Sizes of Heaters—Their Application to Residences

Size Heaters	*Gals. per Min.	Application
No. 85	2	For very small hot water requirements, where fixtures are compactly grouped, pipe runs are short, and in the case of a residence, where there are but few people in the family.
No. 95	2½	For small hot water requirements where conditions are much the same as above. Ideally meets the needs of the modern small home where fixtures are compact, pipe runs short and where there are but a few people in the family.

\*These figures are approximate depending on the temperature of the incoming water. The capacity is rated on a temperature rise of 63°.

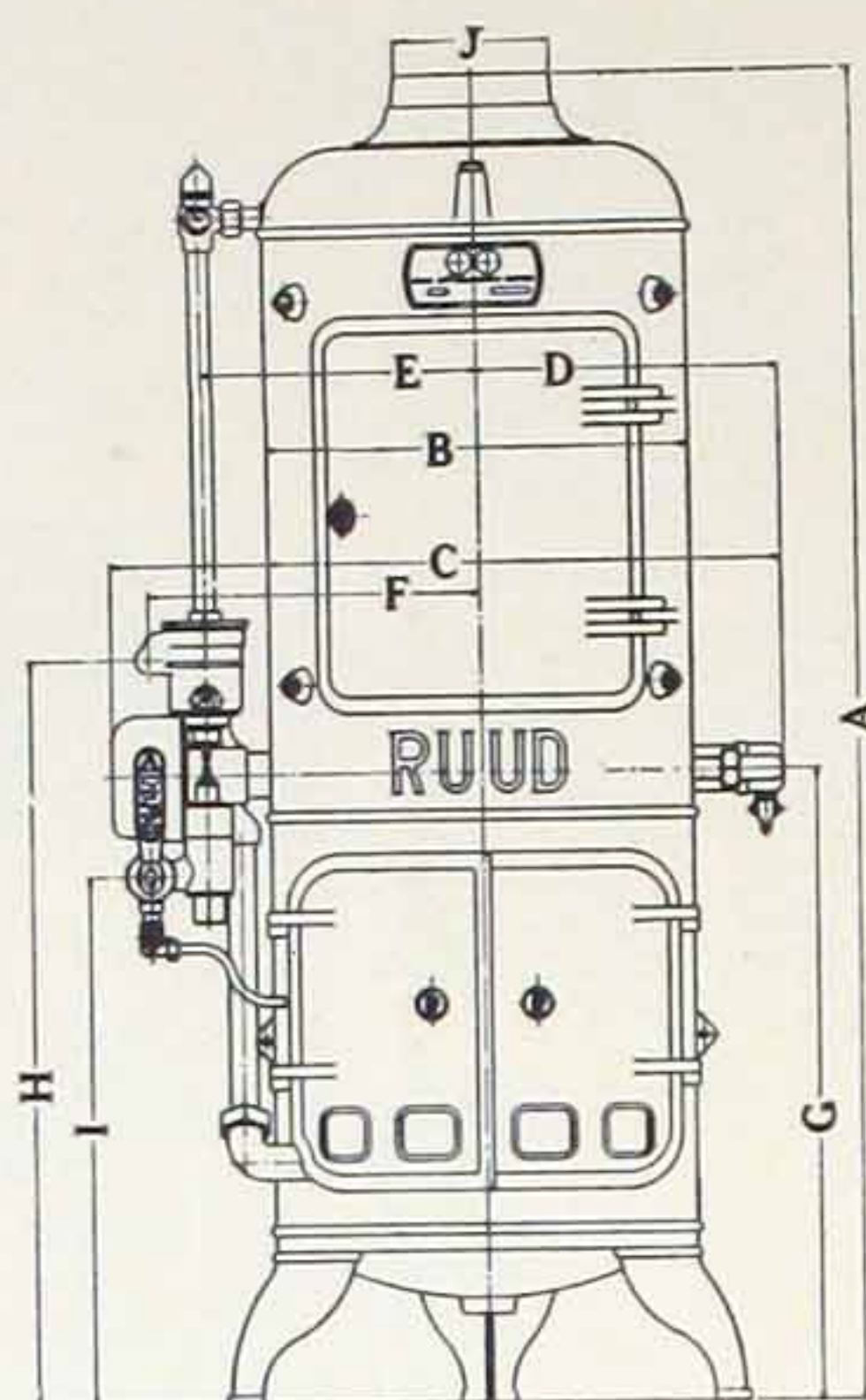
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#### BULLETINS

1. Ruud Automatic Water Heaters (Instantaneous Type).
2. Ruud Automatic Water Heaters (Cottage Instantaneous Type).
3. Ruud Automatic Storage Systems for Domestic Use.
4. Ruud Multi-Coil Automatic Storage Systems.
5. Ruud Tank Water Heaters.

This sheet is furnished for the files of Architects and conforms to the size recommended by the American Institute of Architects.





Dimensions of Heaters

Htr. Sizes	A	B	C	D	E	F	G	H	I	J
85	39 $\frac{3}{4}$ "	13 $\frac{1}{8}$ "	20 $\frac{1}{2}$ "	8 $\frac{7}{8}$ "	9 $\frac{1}{8}$ "	10 $\frac{1}{2}$ "	19 $\frac{1}{4}$ "	23"	16 $\frac{1}{2}$ "	4"
95	42 $\frac{5}{8}$ "	13 $\frac{7}{8}$ "	21 $\frac{3}{4}$ "	9 $\frac{3}{4}$ "	9 $\frac{1}{4}$ "	10 $\frac{1}{2}$ "	19 $\frac{3}{8}$ "	23 $\frac{3}{8}$ "	16 $\frac{7}{8}$ "	5"

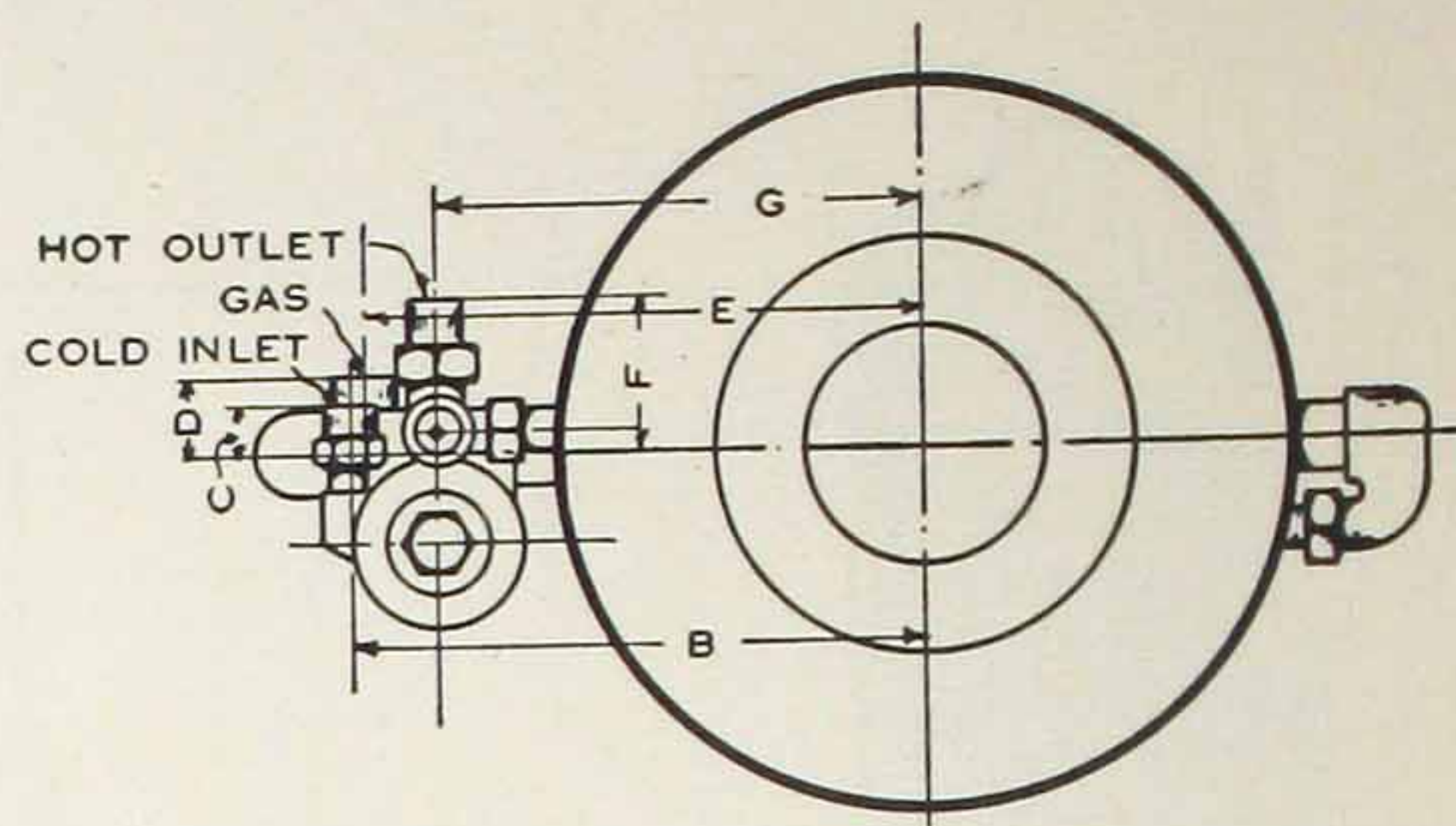


Table of Roughing-in Dimensions

Heater Sizes	B	C	D	E	F	G
85	10 $\frac{5}{8}$ "	2 $\frac{1}{4}$ "	2 $\frac{1}{2}$ "	10 $\frac{1}{2}$ "	3 $\frac{1}{4}$ "	8 $\frac{3}{4}$ "
95	10 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	2 $\frac{3}{4}$ "	10 $\frac{3}{4}$ "	3"	9 $\frac{1}{4}$ "

## STRUCTURAL SPECIFICATIONS

### Ruud Automatic Gas Water Heater

(Cottage Instantaneous Type)

**Shell.**—Best grade light grey iron castings. Sectional construction assembly for ease of dismounting. Inner lining of cast iron on upper half of shell and on upper door, provides dead air space for insulation, reducing radiation to minimum. Top casting and base. Base forms a pan for collection of condensation and is tapped for attachment of permanent drain connection.

**Coils.**—Seamless tubing of "premium" copper, tested to stand hydrostatic pressure of 1000 pounds per square inch, tested again after assembling to 300 pounds per square inch. Coil formed of several helical staggered sections of convenient length joined by brazing or couplings when ordered. In latter case,

all sections are detachable. Section of coil in fire zone of heavier gauge.

**Burners.**—Burners are of best grade grey iron castings with separable cap and perforated flat brass flame check. Cap, flame check and mixer casting held firmly as a unit with two brass bolts. Burners are mounted in battery on brass spuds in burner ring or manifold.

**Mechanism.**—Patented Ruud Dual Fuel Control, consisting of water flow valve or motor cylinder, operating independent gas valve of simplest construction, and Internal Thermostat controlling a secondary, independent gas valve. The two controls of gas flow, by water and thermostat, are entirely independent of each other, yet making for a control of the gas instantly responsive to conditions and absolutely safe under all conditions.

## Capacities of Heaters in Gallons per Minute

Temperature Raise

Heater Sizes	50°	60°	70°	80°	90°	100°	110°	120°
85	2.52	2.10	1.80	1.58	1.40	1.26	1.15	1.05
95	3.15	2.62	2.25	1.97	1.75	1.58	1.43	1.31



## Model Specification

### RUUD INSTANTANEOUS AUTOMATIC WATER HEATER (Cottage Type)

Furnish and install where shown on plans,  
 .....Number..... Ruud Instantan-  
 eous Automatic Gas Water Heater (Cottage  
 Type). Make water, gas and flue connections  
 in accordance with manufacturer's printed  
 directions and local regulations.

**General.**—All piping must be run in such a manner as not to interfere with the removal of any parts of the heater.

**NOTE 1.—Location.**—Heater should be placed in a ventilated place as close to point of most frequent use as flue and other conditions will permit. If more than one fixture is to be supplied, they should be located very near each other, so the heater can be installed close by. The hot water line should be just as short and as small in diameter as will deliver the water needed.

**NOTE 2.—Number of Heaters.**—Where the probable demand exceeds the capacity of the No. 95, it may be desirable to install two Cottage Instantaneous Type Heaters or a Ruud Type F Instantaneous Heater, either a No. 3 or 4.

**NOTE 3.—Size of Heater.**—The proper size of heater may be determined from the information table given on this page. It is recommended that the selection be a size larger than that which is barely ample to fill the requirements.

**NOTE 4.**—Multiply the constant, .43, by the height in feet of the highest faucet above the ground. Subtract the product from the water pressure of the street main, or in a house tank system, from the pressure at the basement. The lowest pressure on which a cottage heater can operate is 25 pounds.

**NOTE 5.—Gas Connection.**—See table below, and if the gas line is over 100 feet long, use pipe a size larger than called for.

**NOTE 6.—Flue.**—An independent flue is desirable and should be provided in new houses. It should be located after the heater's location is determined, if possible.

**NOTE 7.—Cold Water Line.**—See table below. Since the Cottage Instantaneous type is not made in low pressure types, 25 pounds pressure per square inch is essential.

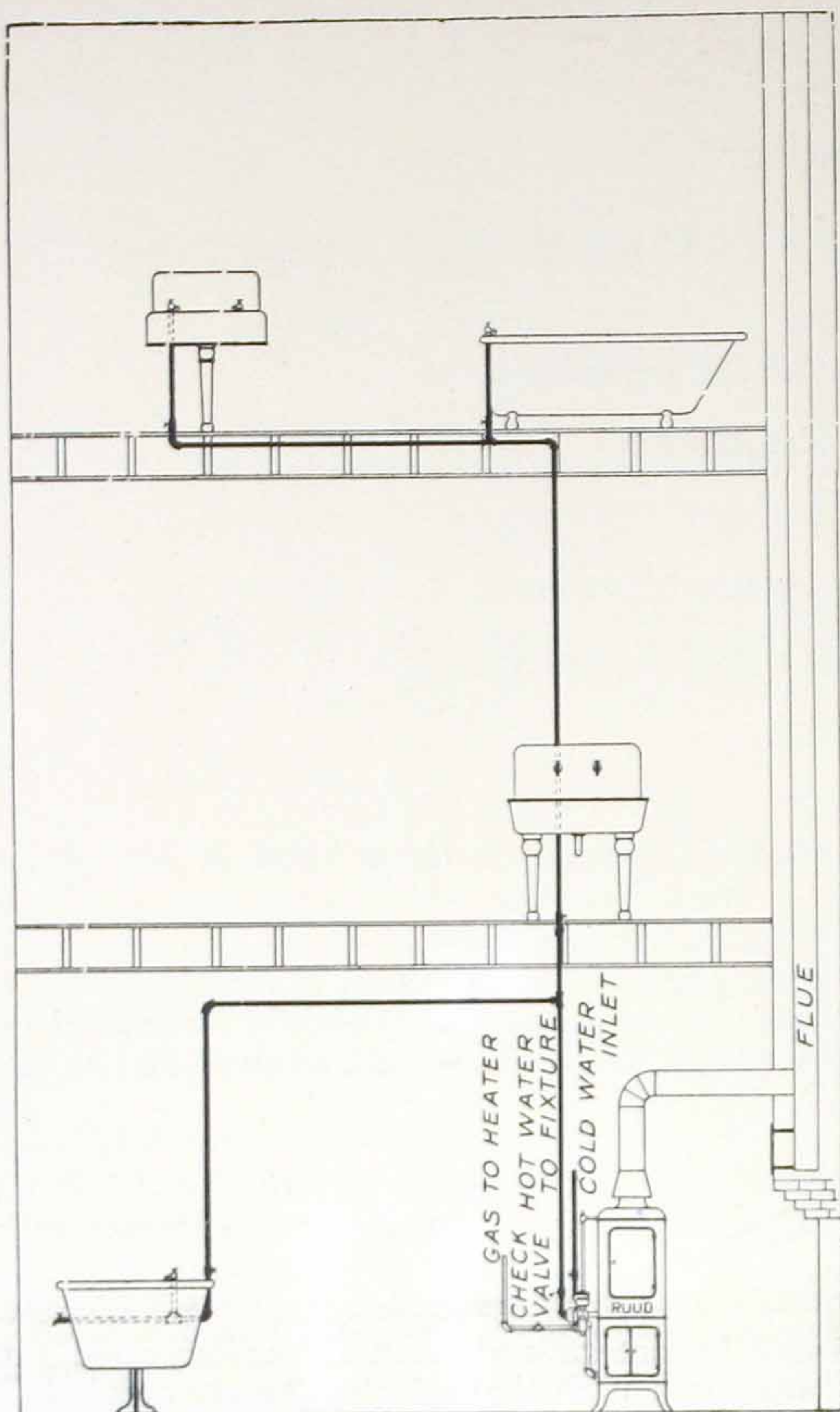
**NOTE 8.—Hot Water Line.**—This line should not be made larger than heater outlet as given in the table below. Before hot water is delivered at the faucet, the cold water in this line must be discharged. Increasing the size of this pipe delays the delivery of hot water at the faucets proportionately.

#### SPECIFICATIONS

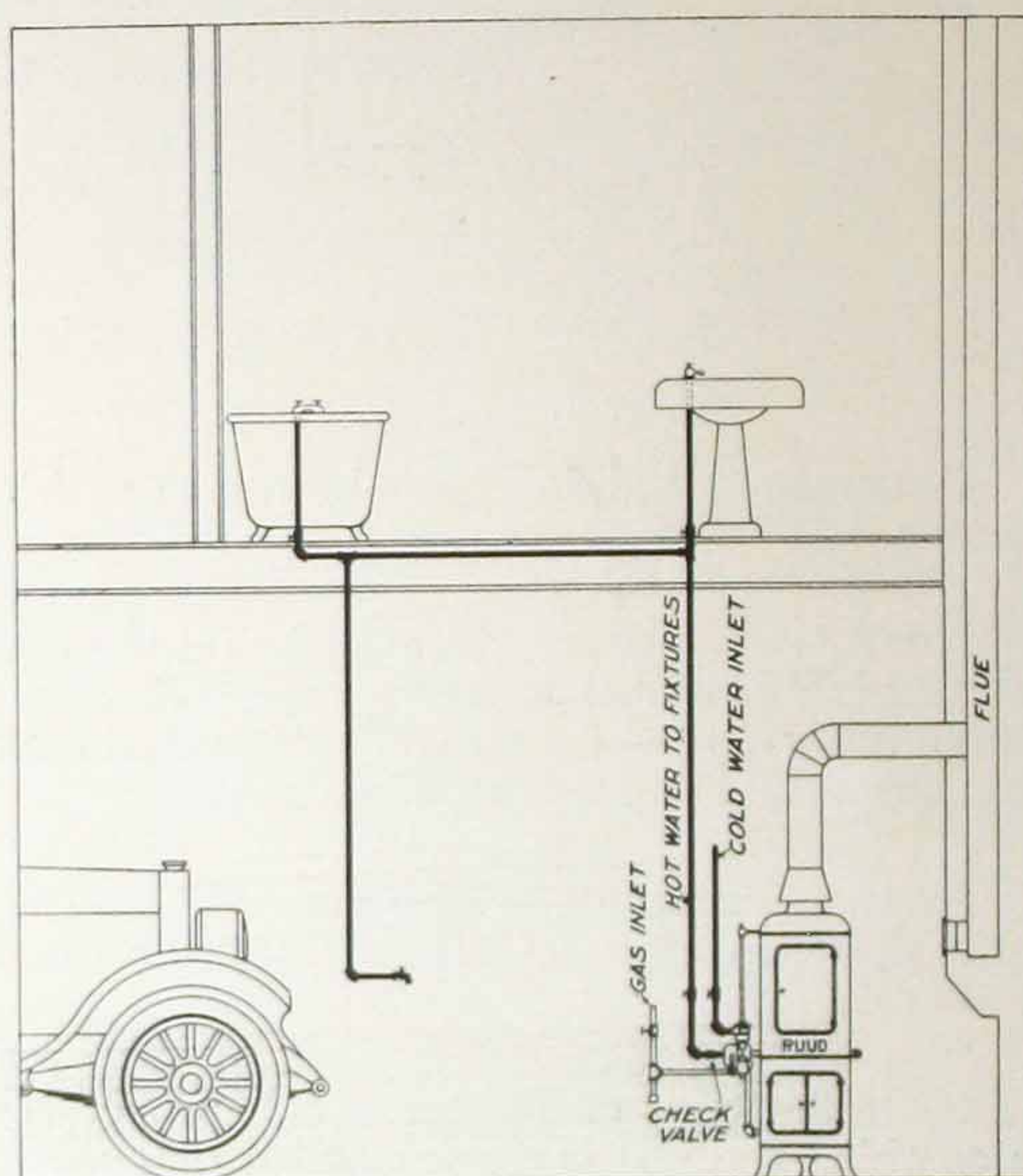
Size	Gals. Per Min.	Temp. Raise	Water Inlet	Water Outlet	Gas Inlet	Flue	Gas Meter	Gas per Min.		Net Weight	Weight Crated
								Art. Gas	Nat. Gas		
85	2	63°	½"	½"	¾"	4"	10 Lt.	2	1	175	205
95	2½	63°	½"	½"	¾"	5"	10 Lt.	3	1¾	210	255

**NOTE**—A water pressure at highest faucet of at least 25 pounds per square inch is required to enable these heaters to deliver their capacity at that point.

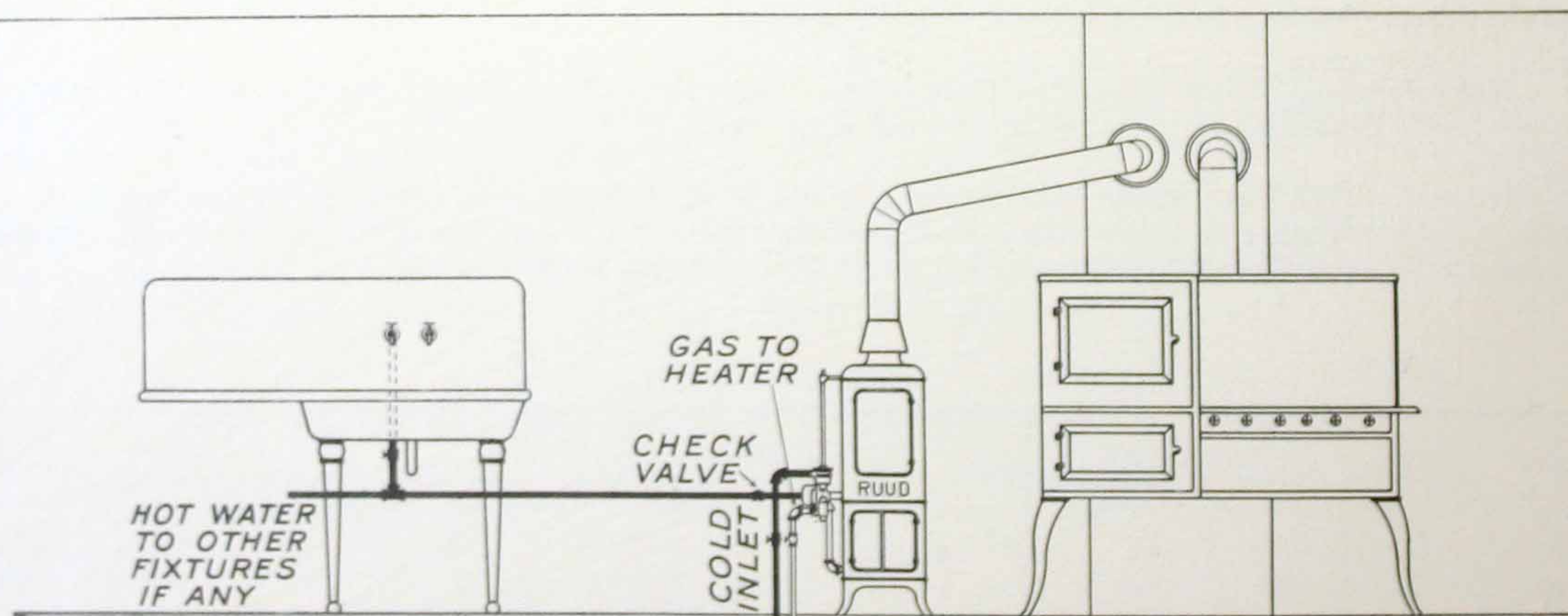




The Ruud (Cottage Instantaneous Type) installed in the basement, where fixtures are compact and the pipe runs are short



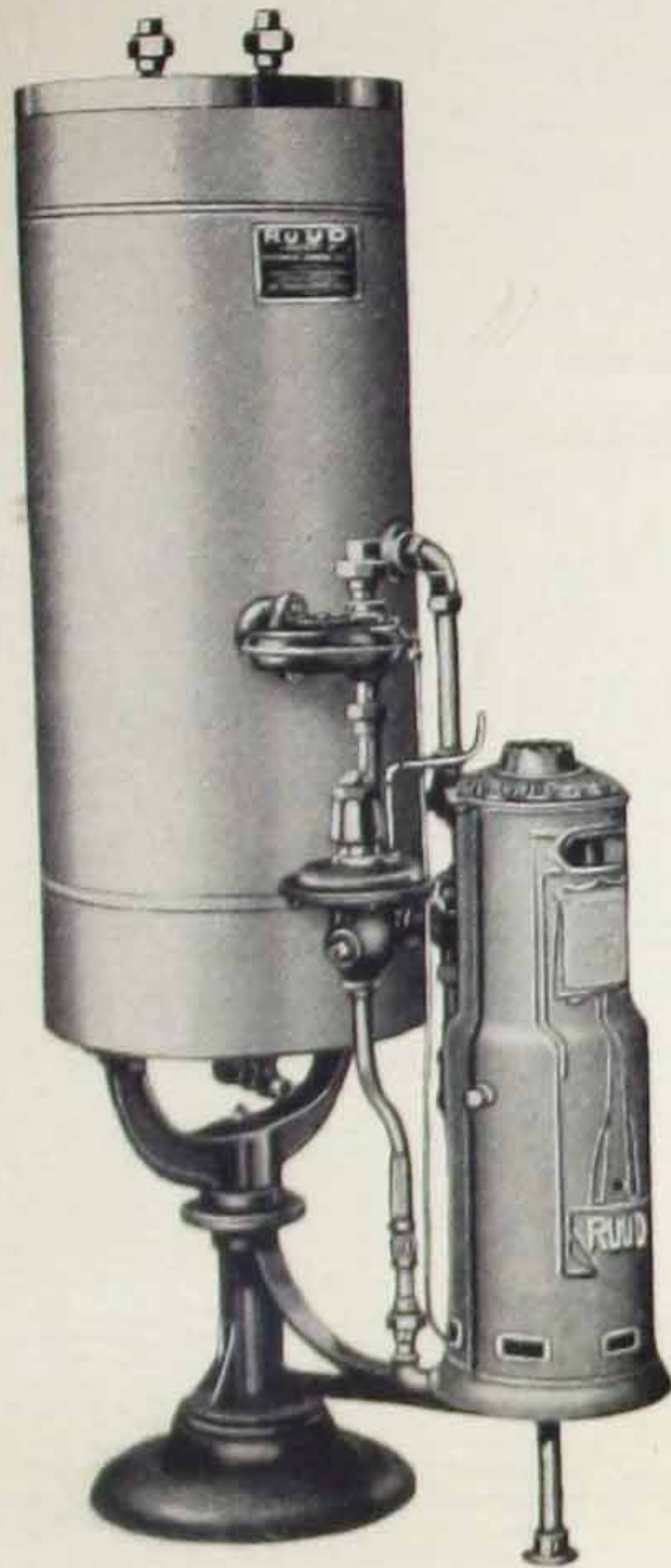
The Ruud (Cottage Instantaneous Type) installed in private garage, supplying hot water for car washing and for bathroom above garage



The Ruud (Cottage Instantaneous Type) connected in the kitchen, close to the sink, and supplying hot water to the bathroom when the pipe is not over twelve feet



## RUUD AUTOMATIC STORAGE SYSTEMS For Domestic Use



Ruud No. 30



Ruud No. 40



Ruud No. 50

RUUD AUTOMATIC STORAGE SYSTEMS, being free from limitations imposed by gas and water pressure conditions, are almost universally adaptable. In that respect, in their ability to supply a heavy re-current demand, as well as in the principle of their design and construction, they are similar, except in size, to Ruud Multi-Coil Automatic Storage Systems.

Ruud Storage Systems are built as units complete, ready to set up. A System consists of a tank made either of super-weight best quality iron or copper (if specially ordered), surrounded by a heavy iron jacket, holding in place a heater whose copper coils are readily removable when necessary, and the Ruud All-Metal Thermostatic Moment-Valve. Heater and tank are attractively finished in gray porcelain enamel.

The principle of operation is the maintenance of the water in the tank at a fixed temperature, ready for any demand. This is accomplished by the Ruud All-Metal Thermostatic Moment-Valve, which shuts the gas off when the water is at the temperature desired, and turns the gas on whenever the water in the tank needs more heat.

### Size of Heaters—Their Application to Residences

The following is a quick reference table for determining the correct size of System for a residence. If special conditions exist, the selection of size should be made without reference to this table. Our service and advice are always available.

No. of System and Capacity	For Residences Having
No. 30—Has a No. 30 Heater with a 24-Gallon Tank.	Bathroom, laundry and kitchen outlets. For small family.
No. 40—Has a No. 40 Heater with a 40-Gallon Tank.	Private bathroom, one servants' bathroom, kitchen sink and laundry.
No. 50—Has a No. 50 Heater with a 66-Gallon Tank.	Three or four bathrooms, one or two bedroom lavatories, kitchen sink and laundry trays.

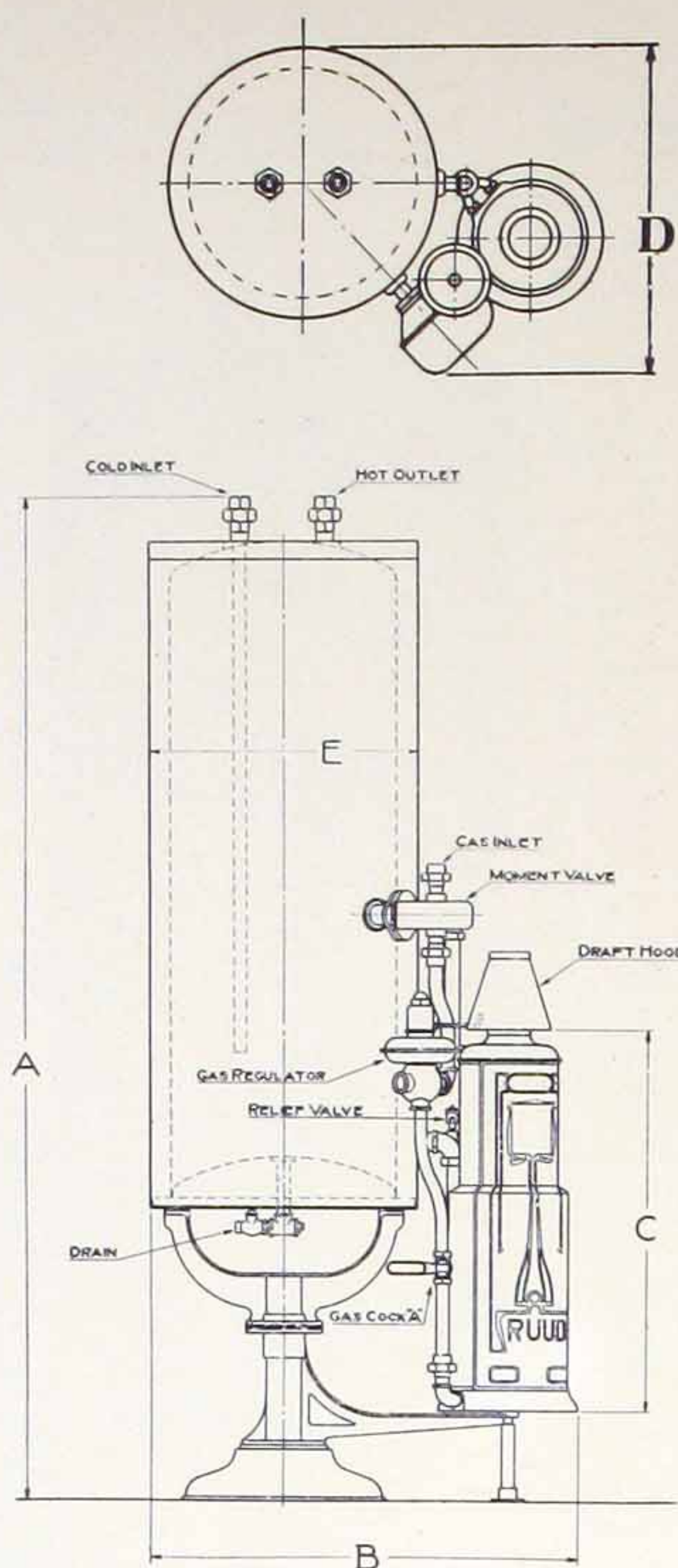
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#### BULLETINS

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4. Ruud Multi-Coil Automatic Storage Systems.
5. Ruud Tank Water Heaters.

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**Table of Dimensions**

Heater No.	A	B	C	D	E
30	66"	30"	27 $\frac{1}{4}$ "	24"	17"
40	72"	31 $\frac{1}{2}$ "	27 $\frac{1}{4}$ "	25"	19"
50	77"	34 $\frac{1}{4}$ "	33 $\frac{1}{2}$ "	32"	23"

### Special Data

Super-weight galvanized steel tanks with copper-brazed seams, as described on page 3, are regularly furnished with Ruud Automatic Storage Systems. No orders can be filled with tanks having Steam-Coils, Man-Holes, Hand-Holes or other variations.

In districts where the water is of a nature that is destructive to galvanized iron tanks, we recommend that copper tanks be used. Ruud copper tanks of quality equal to our galvanized tanks can be furnished where desired.

### Ruud Automatic Storage Systems for Domestic Use Combinations Regularly Made and Connection Specifications

Number of System	Capacity of Tank	Size of Circulators	Cold Water Inlet	Hot Water Outlet	Gas Supply	Size Flue	Size Meter	Weight Net Lbs.	Weight Crated Lbs.
30	24 Gal.	1"	$\frac{3}{4}$ "	$\frac{3}{4}$ "	$\frac{3}{4}$ "	3"	10 Light	307	403
40	40 Gal.	1"	$\frac{3}{4}$ "	$\frac{3}{4}$ "	$\frac{3}{4}$ "	4"	10 Light	355	460
50	66 Gal.	1 $\frac{1}{4}$ "	1"	1"	$\frac{3}{4}$ "	4"	10 Light	495	695

### Exclusive Features of Ruud Automatic Storage Systems

**THE ORIGINAL STORAGE SYSTEM**—The Ruud Manufacturing Company made the first automatic storage system. The present systems embody an experience of over 35 years.

**A COMPLETE LINE**—Made in three sizes: Numbers 30, 40 and 50, to fill requirements of all types of residences, and the needs of the industrial and commercial field.

**STANDARDIZED MANUFACTURE**—The design of the three units is substantially the same, differing only in details affecting capacity.

**QUALITY**—No feature has been neglected that affects the superior service of Ruud Automatic Storage Systems. All materials have been subjected to long and severe tests before adoption.

**APPEARANCE**—The heater is finished with two coats of high temperature porcelain enamel. Tank jacket is finished with two coats of air-drying enamel.

**CONSTRUCTION**—Heater shell is of heavy cast iron with cast iron liner. Gas Regulator included as standard equipment. Nos. 30 and 40 have double detachable coils. No. 50 has triple detachable coils. Copper tubing of 17 and 18 gauge. Copper water circulators. All brass fittings. Standard two-piece Ruud burner. Non-corrosive pilot light. Standard Ruud All-Metal Thermostatic Moment-Valve, the most reliable temperature controlling device on the market.

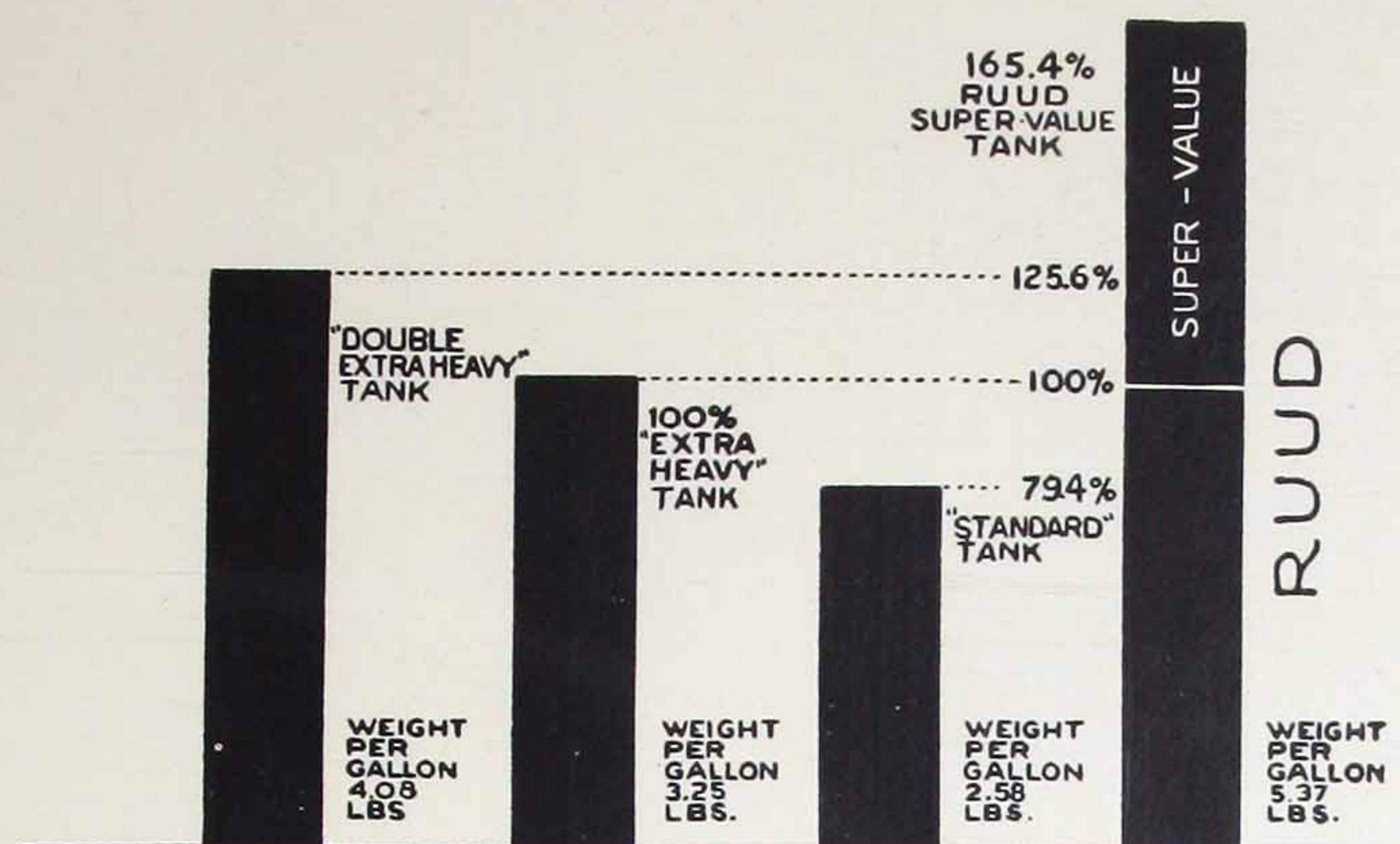
**Super-Value Tank** with copper-brazed seams is especially built—granulated cork insulation with heavy iron outer jacket.

**TANK**—Triple extra heavy best quality steel tank with copper brazed seams. Granulated cork insulation. Heavy sheet metal jacket. Tank capacities: 24, 40 or 66 gallons.

**GAS CONTROL**—Standard Ruud All-Metal Thermostatic Moment-Valve, the most reliable temperature-controlling device on the market.



## COMPARATIVE TANK VALUES—24 Gallon Tank



The quality of Ruud Tanks is emphatically pronounced when a comparison is made between their weights and the weights of standard commercial tanks. A study of the chart shows this: That if the commercial "extra heavy" tank is rated at 100% value, the Ruud Tank is 165.4%—a super-value of 65.4%.

Tank life is dependent on quality of material, process of manufacture and TANK WEIGHT or the thickness of metal used.

Make your own deductions from the table which shows the average weights of commercial tanks and Ruud Tanks.

Sizes in Gallons	Weight of "Standard" Tank *	Weight of "Extra Heavy" Tank *	Weight of "Double Extra Heavy" Tank *	Weight of RUUD Tank *
24	62 lbs.	78 lbs.	98 lbs.	129 lbs.
40	95 lbs.	120 lbs.	130 lbs.	170 lbs.
66	160 lbs.	185 lbs.	200 lbs.	250 lbs.

\*Two tanks of a given size will not weigh the same, due to unavoidable percentage of difference allowed the metal manufacturers. The table here given is based on averages. Differences however, will be less than five per cent.

Reference to the table and to the chart will show clearly the superiority of Ruud Tanks over the ordinary commercial tanks. In many cases, the Ruud Tank compared to an entire storage system of different make, will weigh more than the entire unit.

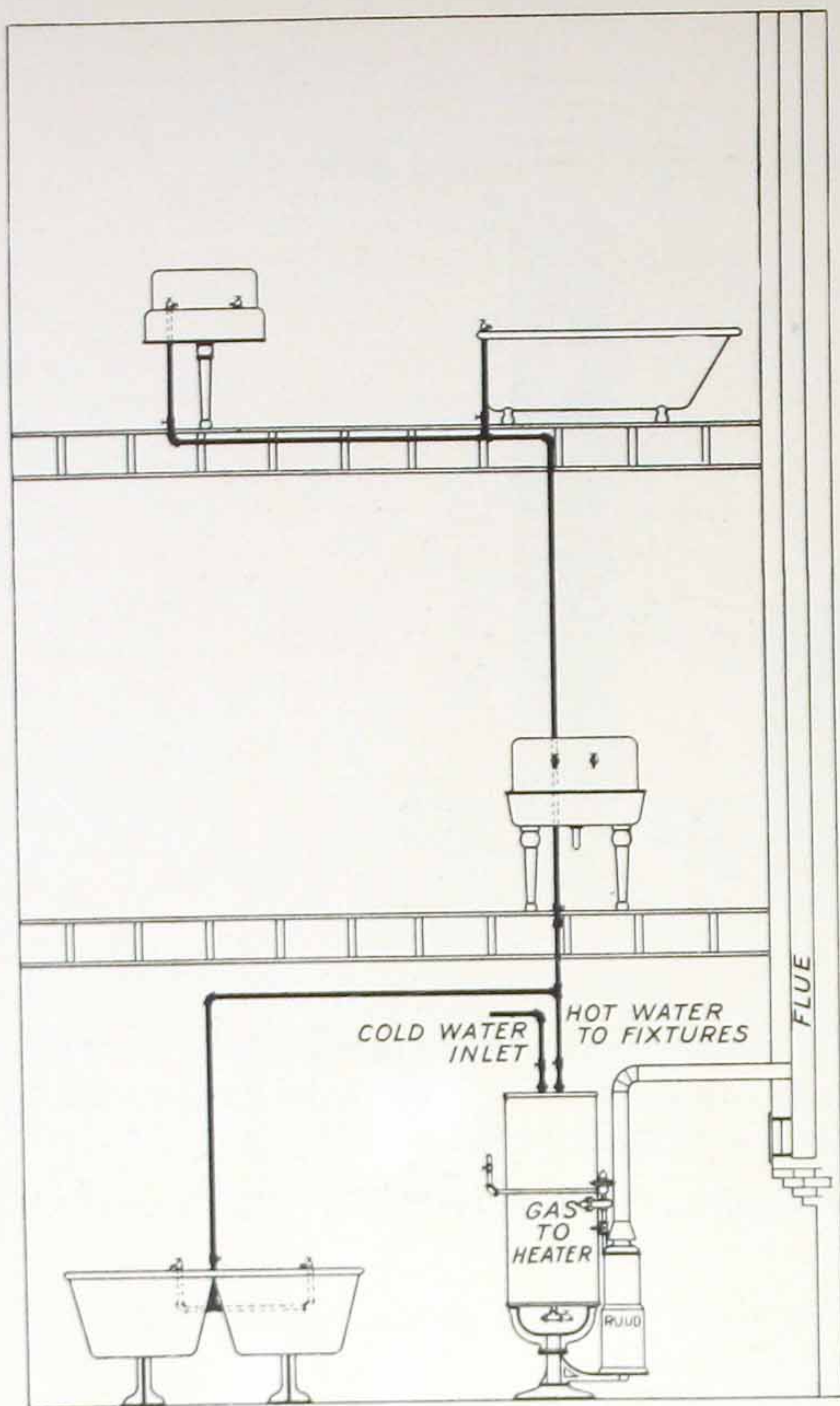
Ruud Tanks are built to specification and that specification calls for uninterrupted service and long life.

### Model Specification

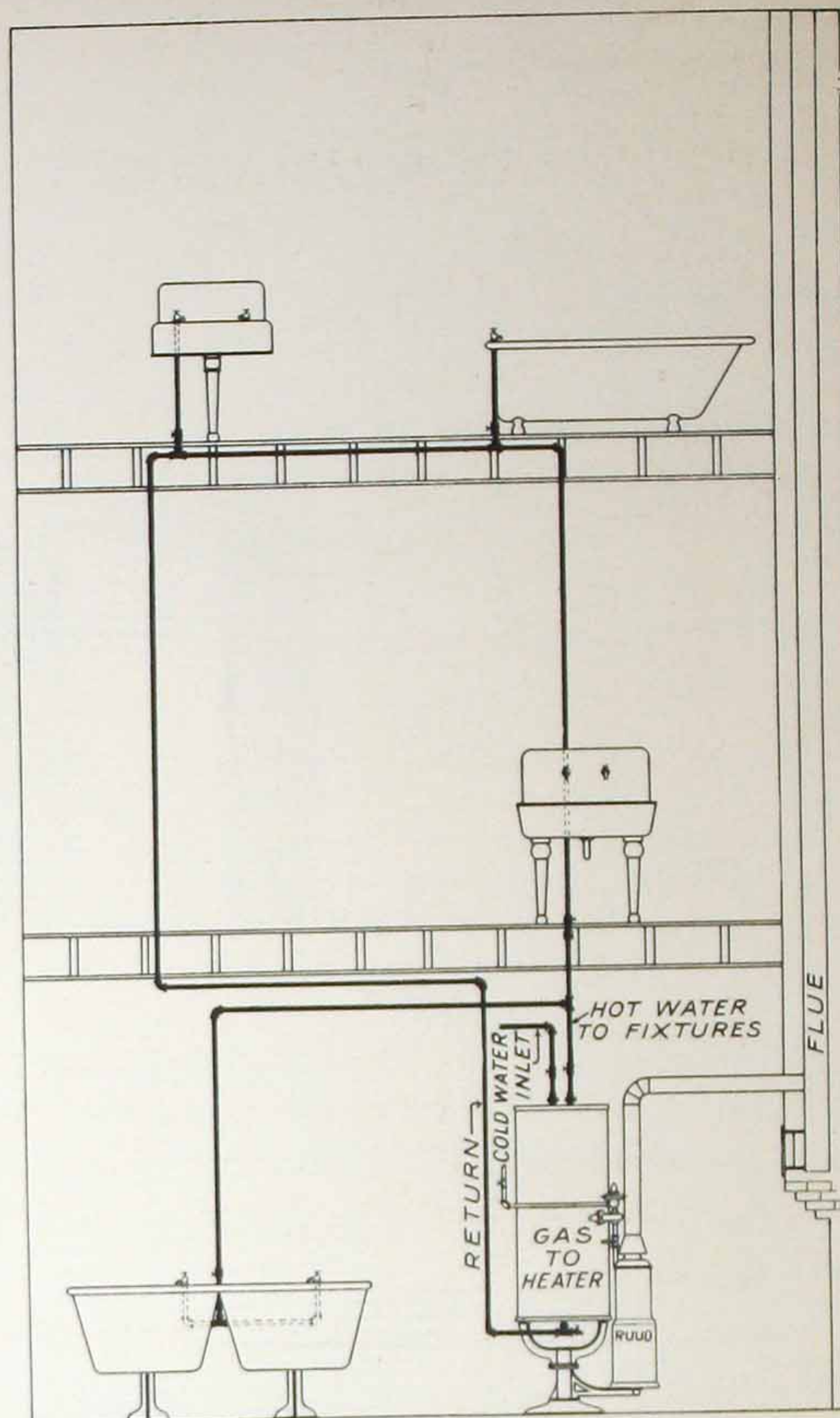
#### RUUD AUTOMATIC STORAGE SYSTEMS

Furnish and install where shown on plans,  
 .....Number..... Ruud Automatic  
 Storage System with.....  
 (galvanized iron or copper) tank. Make water,  
 gas and flue connections in accordance with  
 manufacturer's printed directions and local  
 regulations.

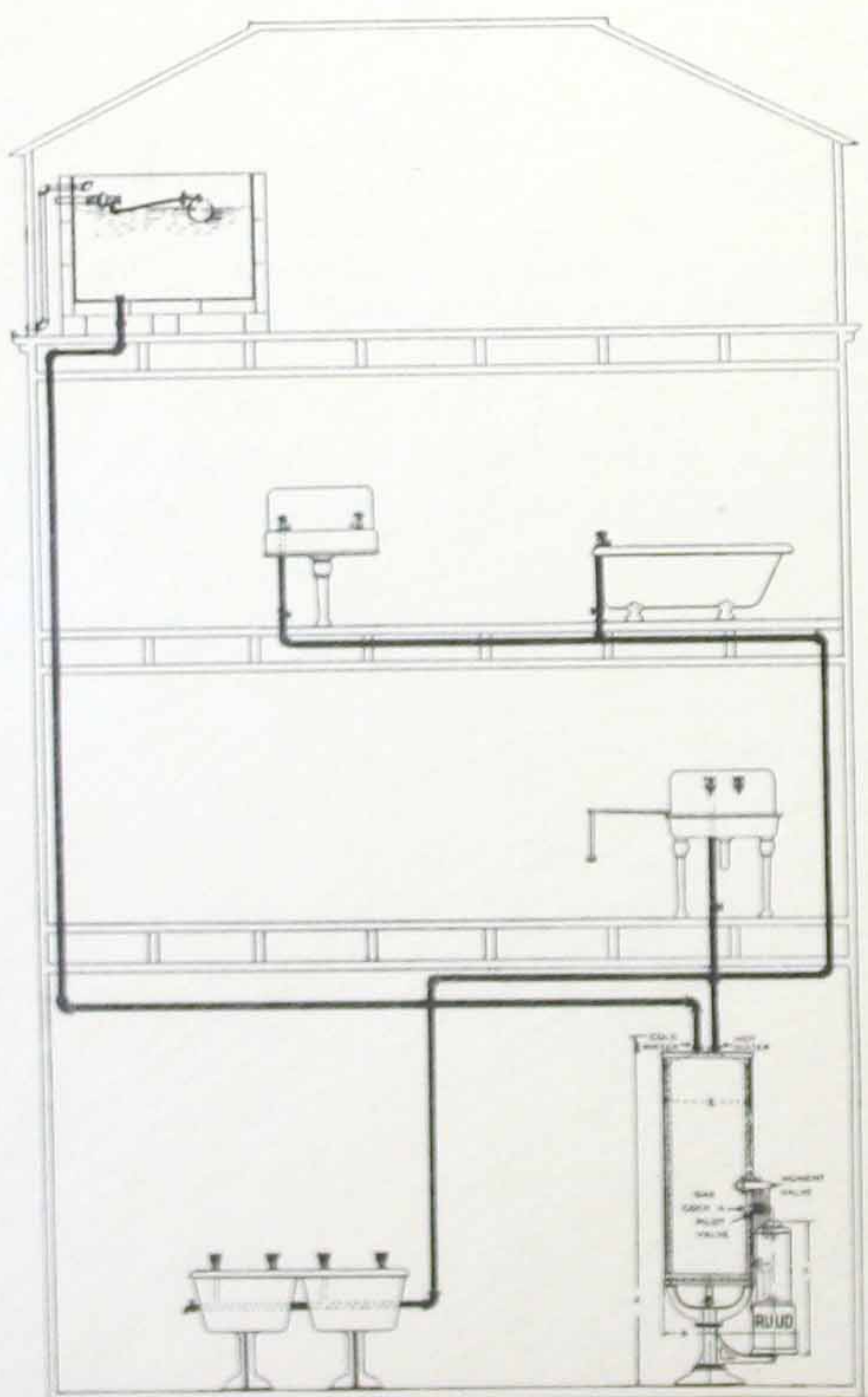




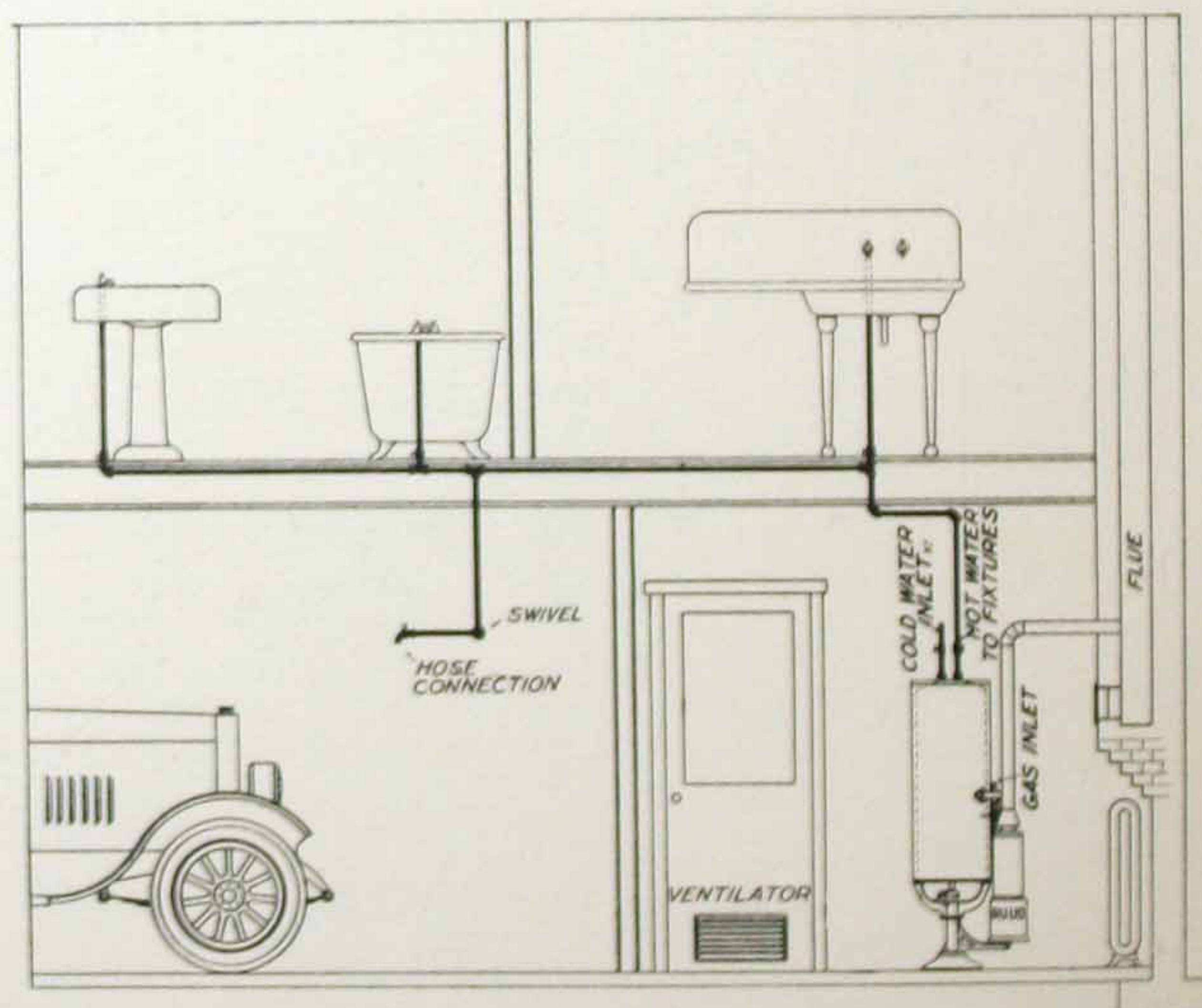
**Ruud Automatic Storage System**  
Installed on direct system of plumbing



**Ruud Automatic Storage System**  
Installed on return circulation system of plumbing



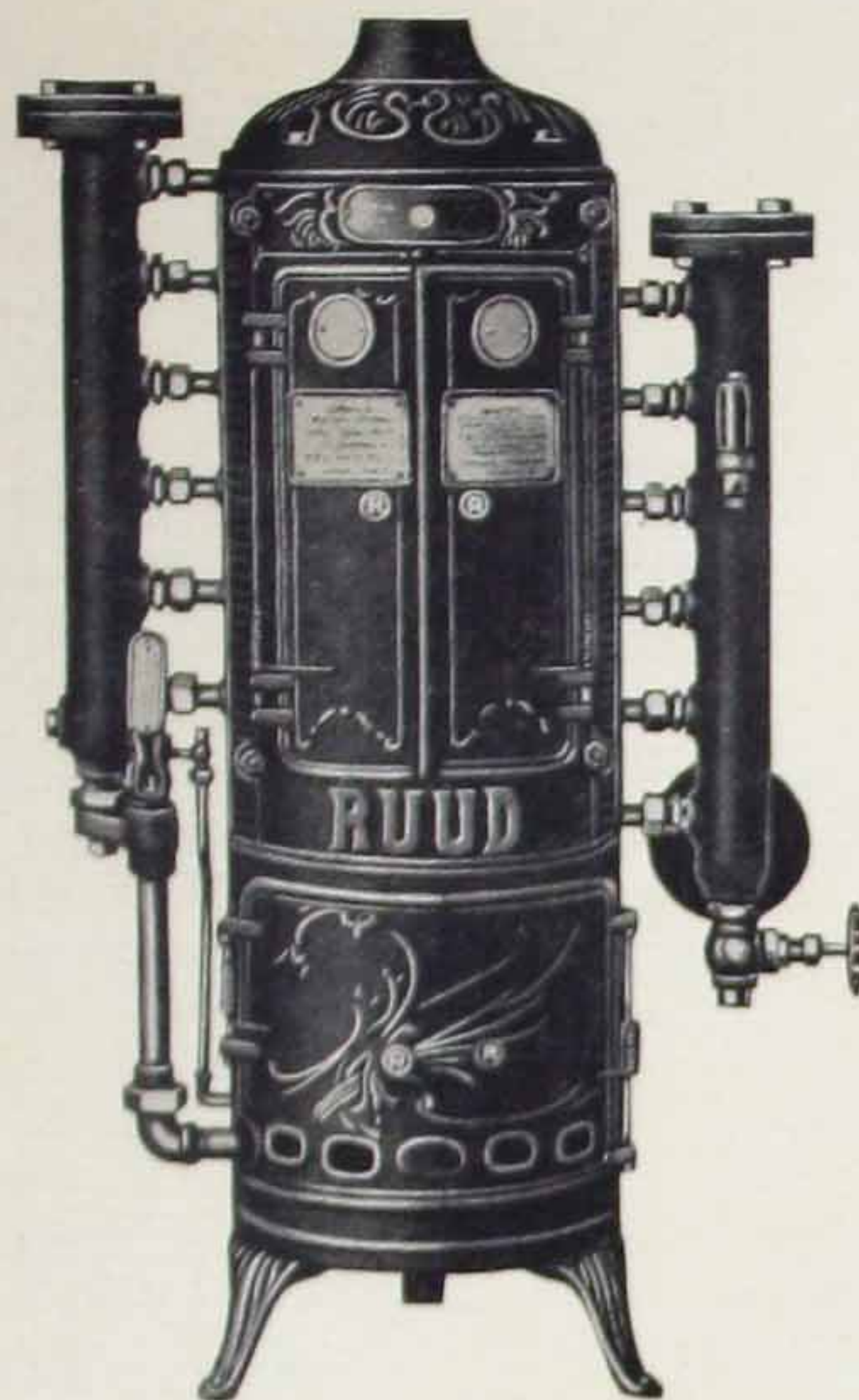
**Ruud Automatic Storage System**  
Installed on direct system of plumbing, water supplied under gravity system from attic tank



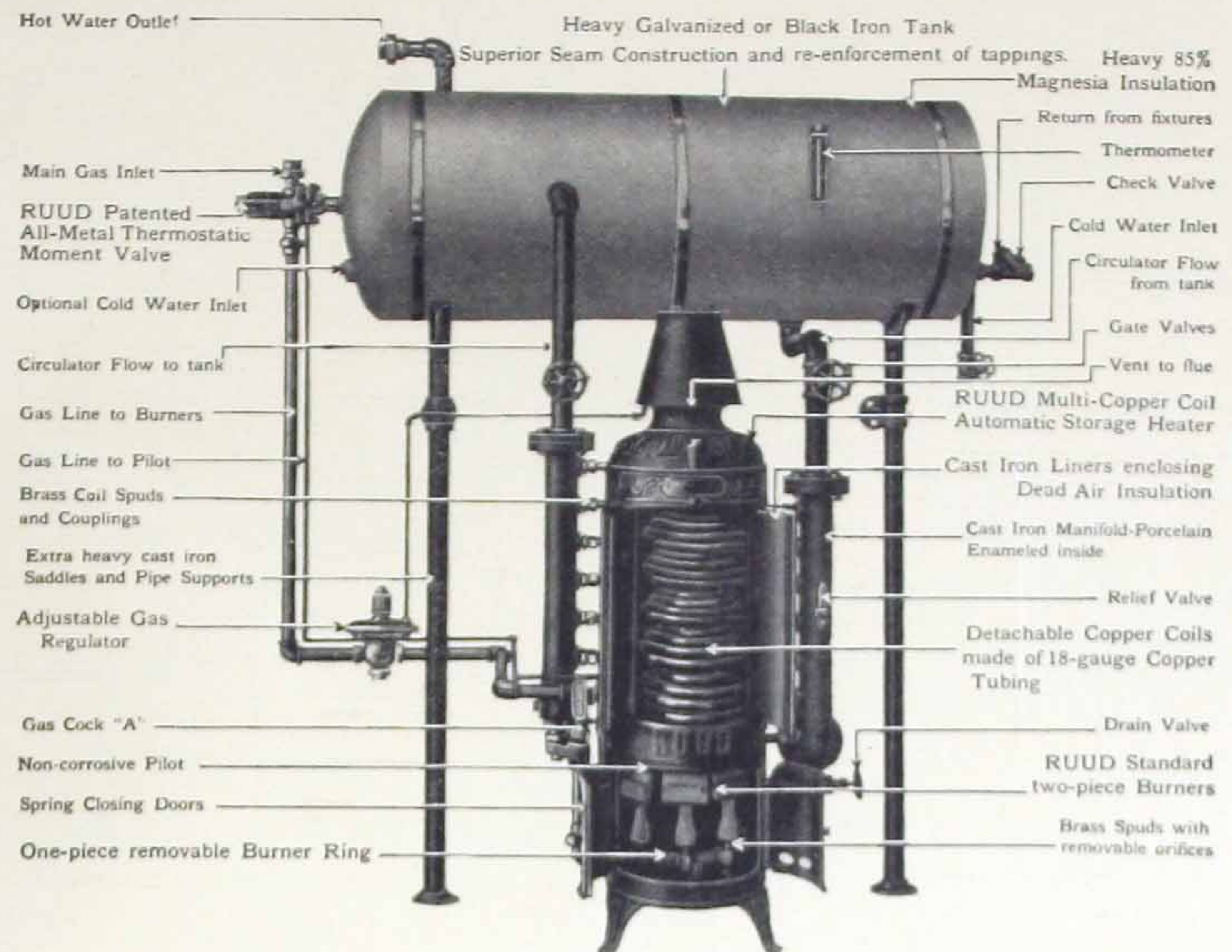
**Ruud Automatic Storage System**  
Installed in private garage, furnishing hot water for car washing and chauffeur's apartment



## RUUD MULTI-COIL AUTOMATIC STORAGE SYSTEMS



**Ruud Multi-Coil Automatic Storage System**



**General Features of Construction**

RUUD MULTI-COIL AUTOMATIC STORAGE SYSTEMS supply hot water in large quantities to fulfill the severe requirements of large residences, apartments, institutions, and buildings where a similar demand exists. They automatically maintain in a storage tank, sufficient hot water at the desired temperature to supply the anticipated demand, by combining as a unit an insulated storage tank of copper, black or galvanized iron, a heater, and a controlling mechanism—the Ruud All-Metal Thermostatic Moment Valve, or a Graduating Thermostat—placed in the tank.

The operation of the system is entirely automatic, the gas being turned on and burned in the main burners of the heater whenever the temperature of the water in the tank drops below that at which the thermostat is set. The gas continues to burn until the water in the tank is restored to the predetermined temperature, when the Moment Valve automatically shuts off the gas to the heater. This positive action of the Moment Valve in closing the gas off instantly and entirely, or permitting it to burn with no graduation of the gas flow, results in an economy of operation heretofore unattainable. Where natural gas is sold at a low rate, the graduating thermostat is often substituted for the Moment Valve. This thermostat will take all the positions between its high and low points of adjustment in accordance with the temperature of the tank water.

### Sizes of Systems

Size System	Requirements
No. 100 Heater, with 80, 100 or 150 Gallon Tank.	Residences having three to five bathrooms, bedroom lavatories, large kitchen sink, pantry sink and laundry. Apartment buildings with six apartments of four or five rooms each.
No. 200 Heater, with 150, 200 or 250 Gallon Tank.	Residences having five to eight bathrooms, large kitchen sink, dishwashing machine, large laundry. Apartment buildings having six to twelve apartments of five or six rooms each.
No. 300 Heater, with 250, 300 or 365 Gallon Tank.	Residences having seven to ten bathrooms, large kitchen sink, pantry sink, dishwashing machine, large laundry. Apartment buildings having ten to twenty apartments of five or six rooms each.
No. 500 Heater, with 425, 500, 600 or 700 Gallon Tank.	Apartment buildings having twenty to thirty apartments of five, six or seven rooms each. Very large homes. Forty to sixty-room hotels.

Issued by

**Ruud Manufacturing Company, Pittsburgh, Pa.**

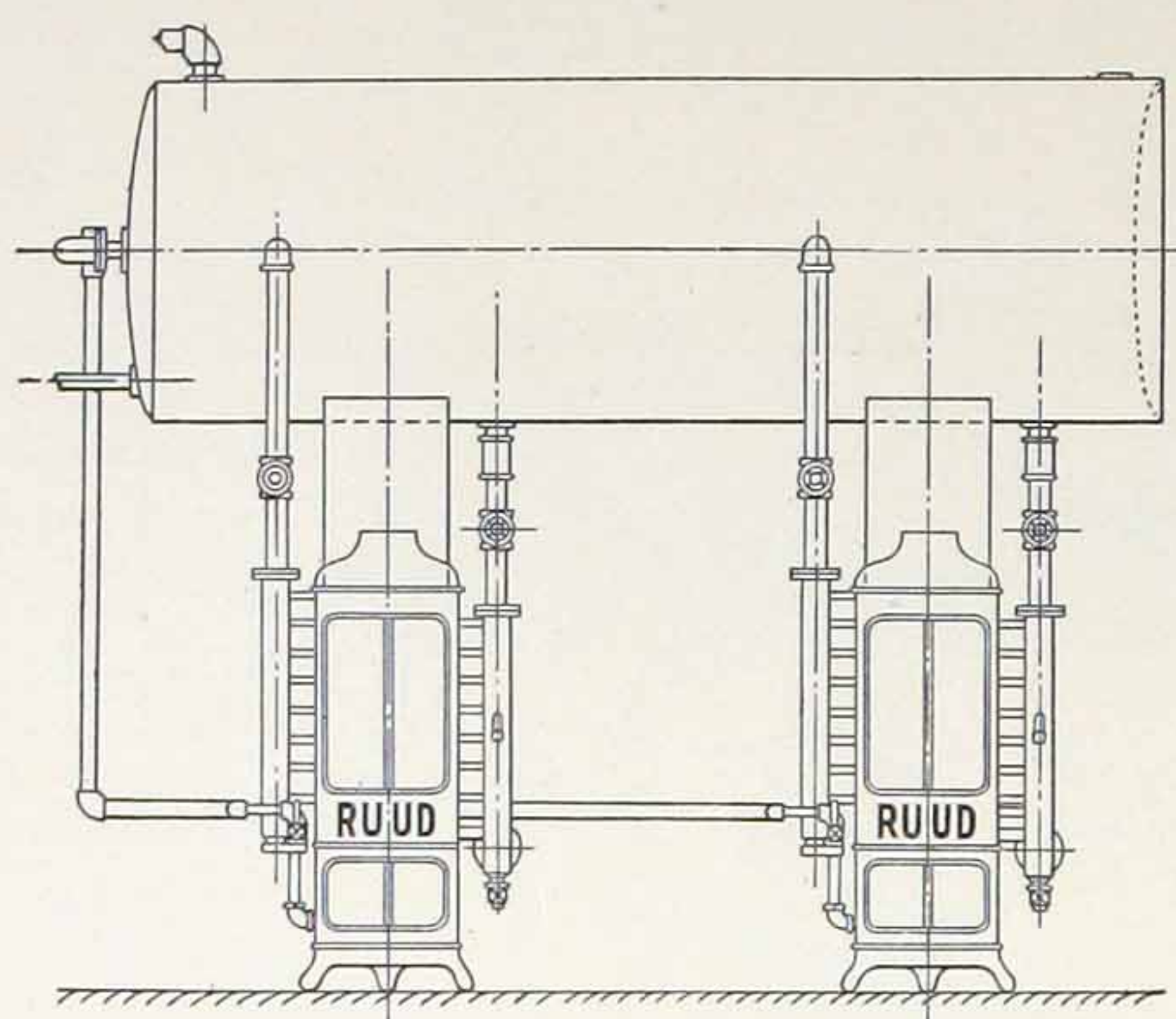
Branches Everywhere

### BULLETINS

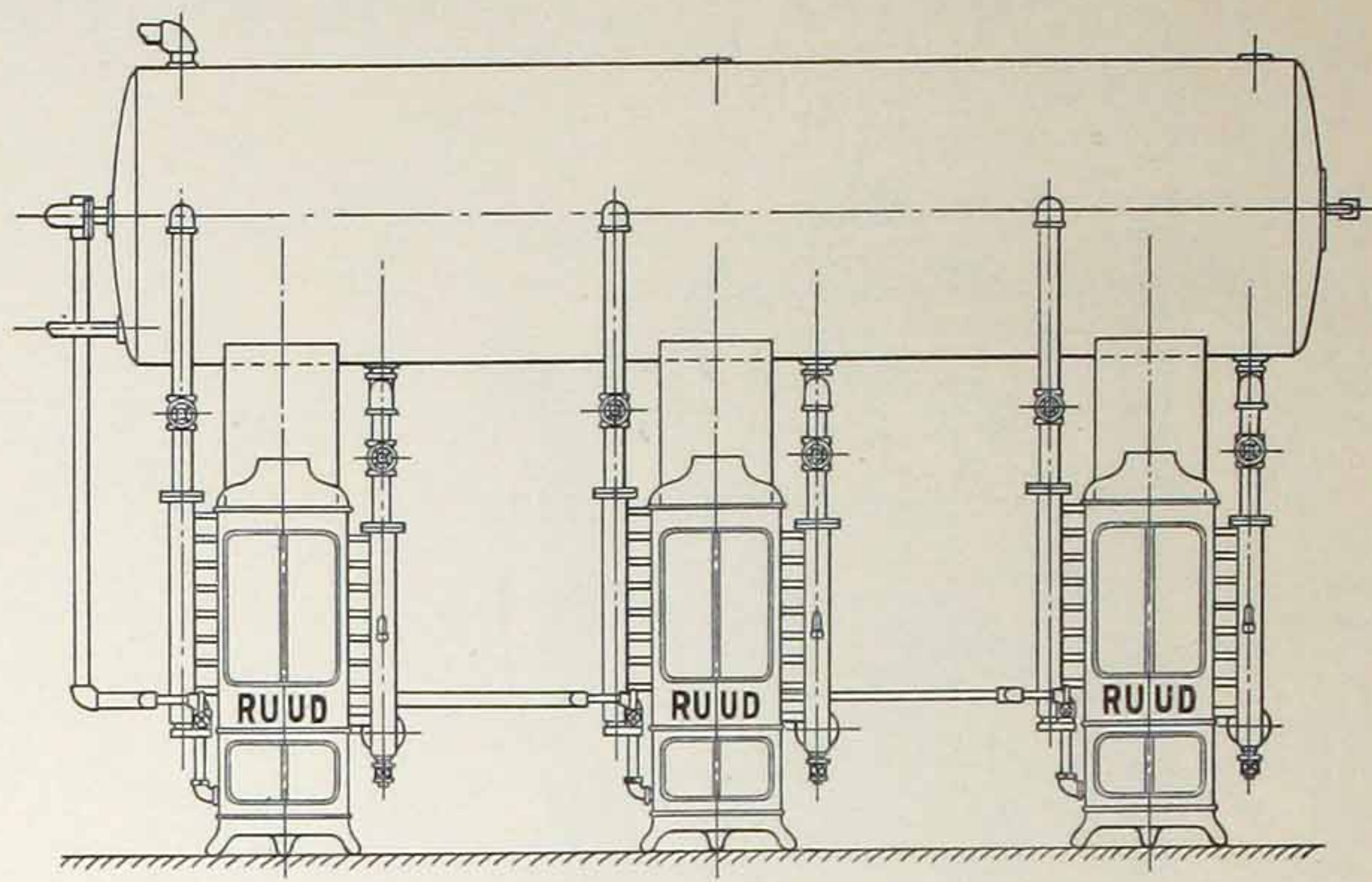
1. Ruud Automatic Water Heaters (Instantaneous Type).
2. Ruud Automatic Water Heaters (Collage Instantaneous Type).
3. Ruud Automatic Storage Systems for Domestic Use.
4. Ruud Multi-Coil Automatic Storage Systems.
5. Ruud Tank Water Heaters.

This sheet is furnished for the files of Architects and conforms to the size recommended by the American Institute of Architects.





Showing Installation—Standard Assembly  
Duplex System



Showing Installation—Standard Assembly  
Triplex System

### Ruud Thermostatic Moment Valves

Size of Valve	Standard with Heater No.	Tank Tapping Required	Total Length	Length Inside Tank	Length Outside Tank	Shipping Weight Lbs.	Weight Net Lbs.
3/4"	100	1 1/4"	23 3/4"	15 1/2"	8 1/4"	32	12
1"	200-300	1 1/4"	32"	22"	10"	47	22
1 1/4"	Duplex 200-300	1 1/4"	32"	22"	10"	54	29
1 1/2"	500	1 1/2"	42 1/2"	30 1/2"	12"	65	32
2"	Duplex 500	1 1/2"	42 1/2"	30 1/2"	12"	73	39

NOTE—Moment valves will be adjusted before shipping to any degree ordered. Regular adjustment is 150 degrees F.

### Ruud Duplex Multi-Coil Storage Systems

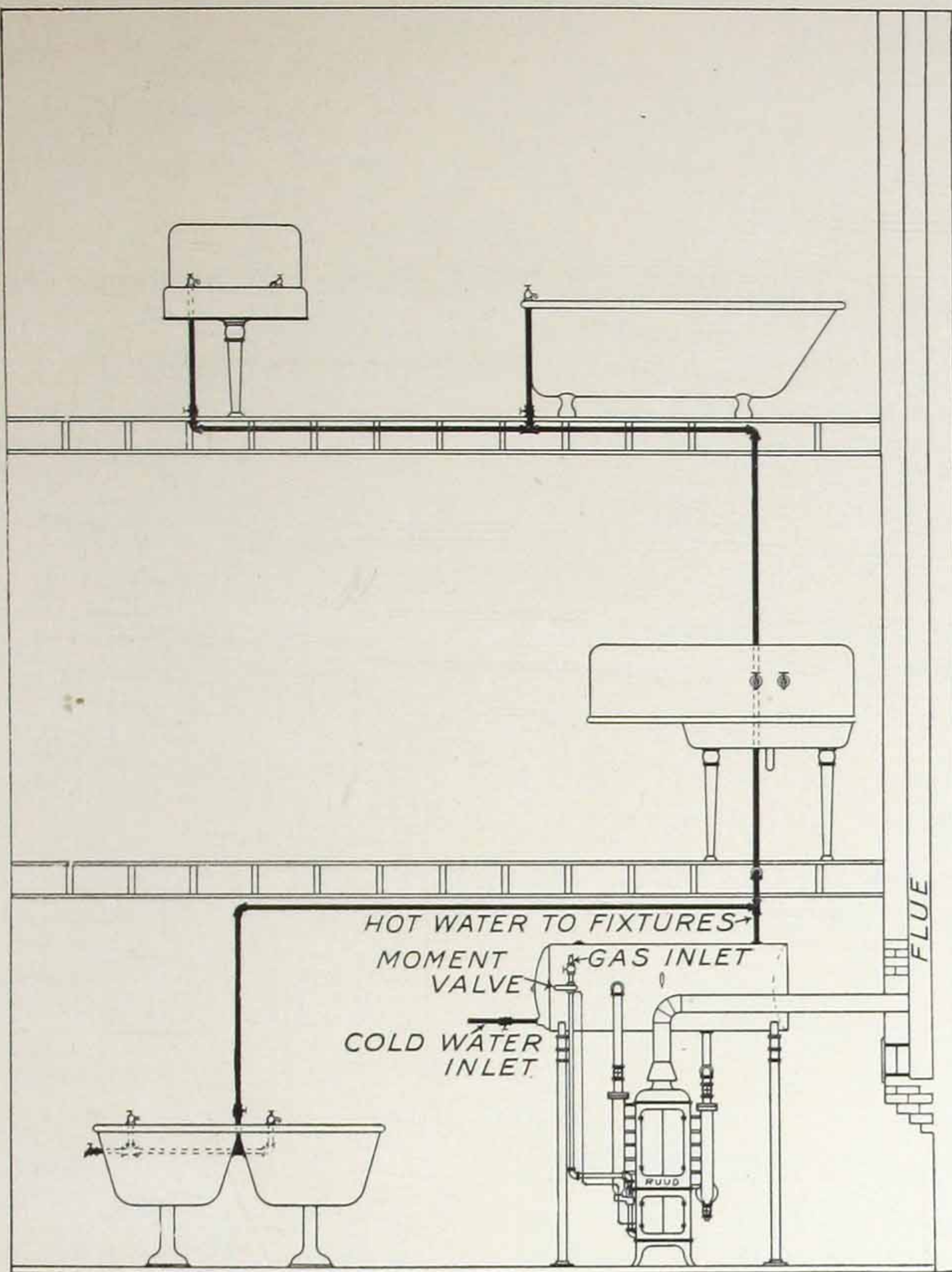
- 2—No. 200 Heaters with 500 Gallon Tank
- 2—No. 300 Heaters with 500 Gallon Tank
- 2—No. 300 Heaters with 600 Gallon Tank
- 2—No. 300 Heaters with 700 Gallon Tank
- 2—No. 300 Heaters with 800 Gallon Tank
- 2—No. 500 Heaters with 800 Gallon Tank
- 2—No. 500 Heaters with 1000 Gallon Tank

Black Iron Tanks are furnished regularly with Duplex Systems.  
All other tanks are special

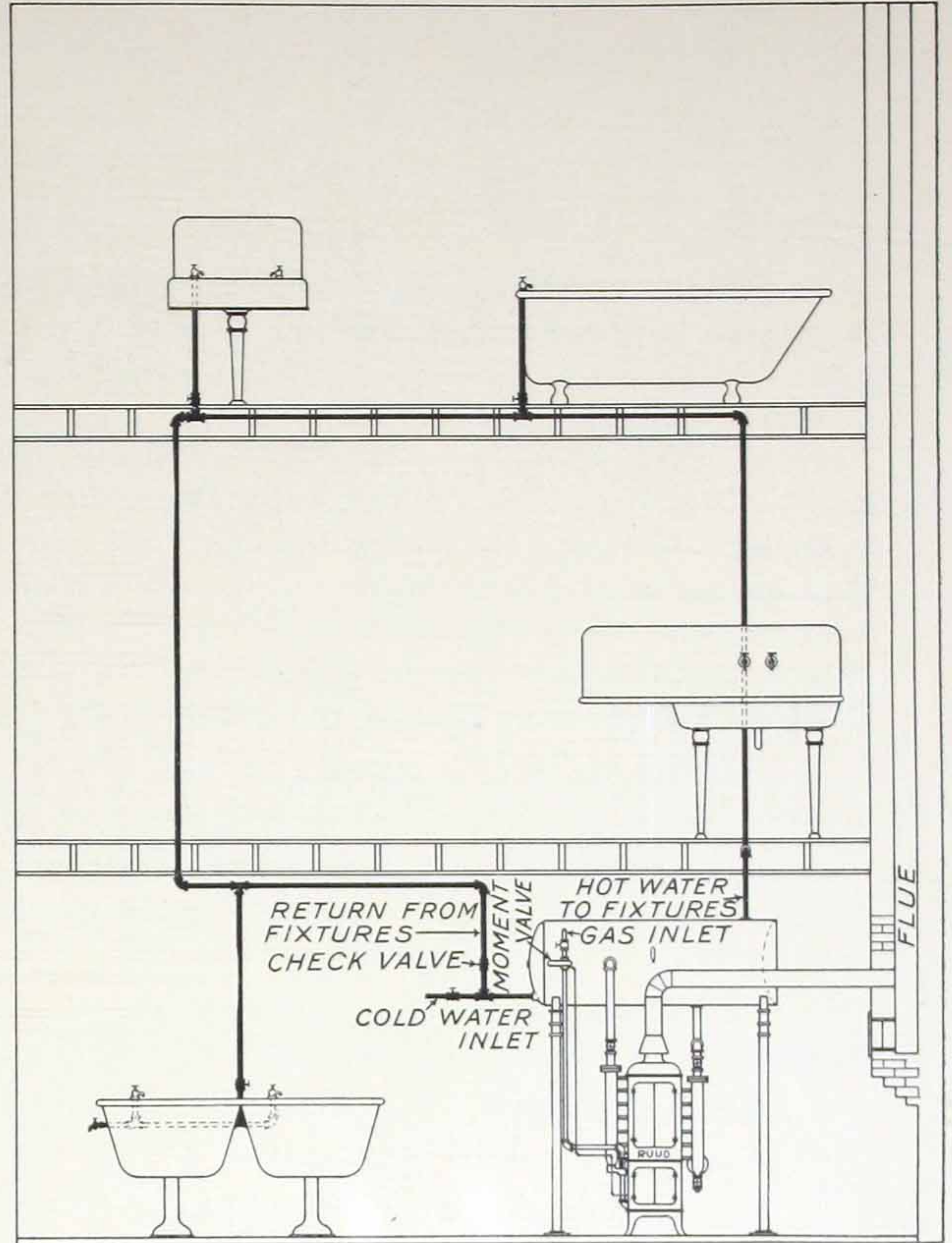
### General Table Ruud Multi-Coil Storage Heater

Size	Per hour capacity—gallons	Average Temp. Raise	No. of Coil Sections	Size Manifold Connection	Size Gas Inlet	Size Flue Connections	No. of Burners	Orifice Nat. Gas	Orifice Art. Gas	Orifice Gasoline Gas	Moment Valve Required	Gas Consumed Per Hour		Size Gas Meter	Weight Crated (lbs.)
												Nat.	Art		
100	100	63°	6	1 1/2"	3/4"	5"	10	53	40	36	3/4"	80	142	20	325
200	200	63°	7	2"	1"	6"	12	53	40	36	1"	150	280	30	430
300	300	63°	8	2"	1"	6"	15	53	40	36	1"	225	375	45	500
500	500	63°	8	2 1/2"	2"	8"	30	53	40	36	2"	375	650	80	935

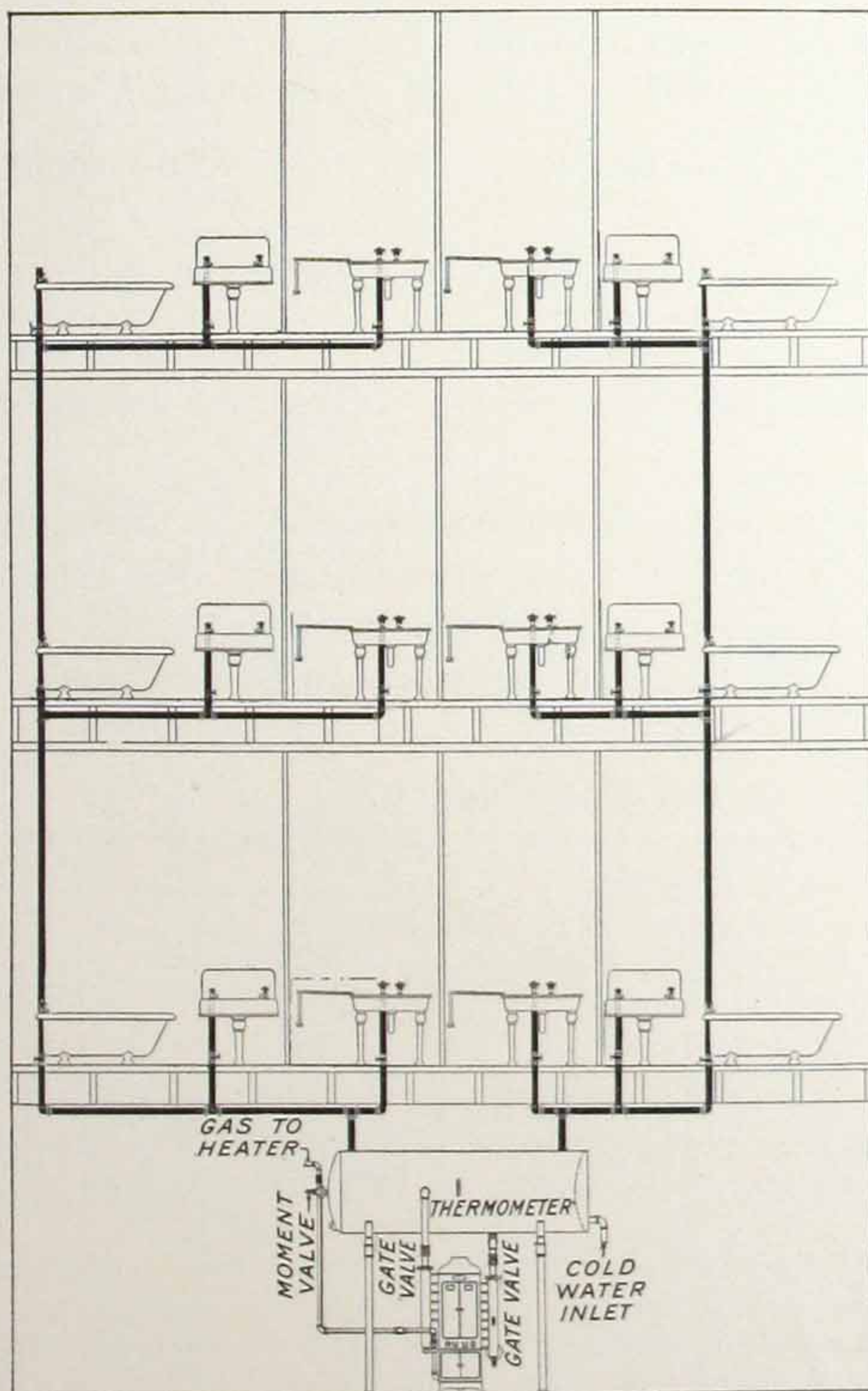




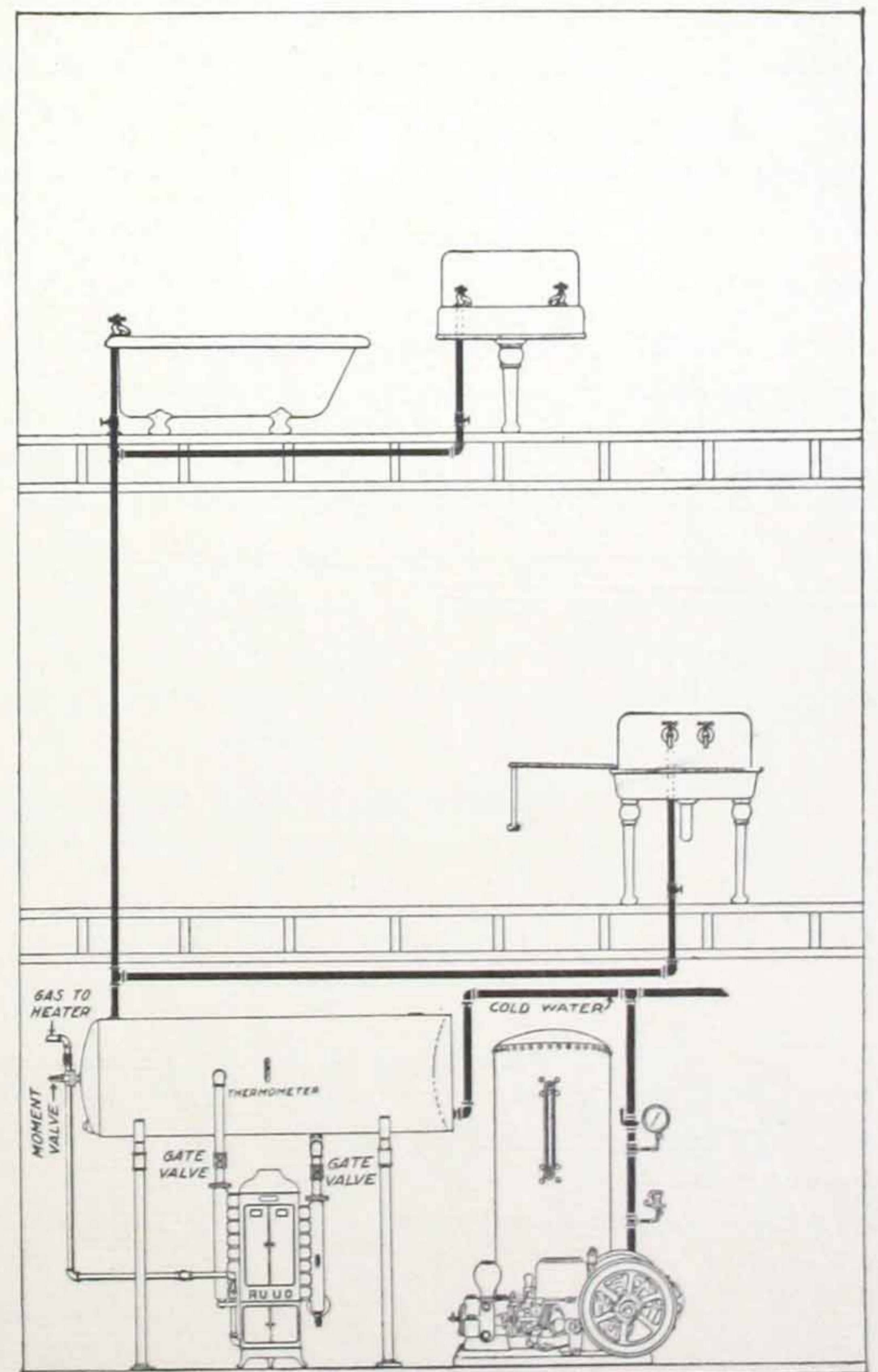
The Ruud Multi-Coil Automatic Storage System installed in residence on direct system of plumbing



Ruud Multi-Coil Automatic Storage System installed in residence on return circulation system of plumbing

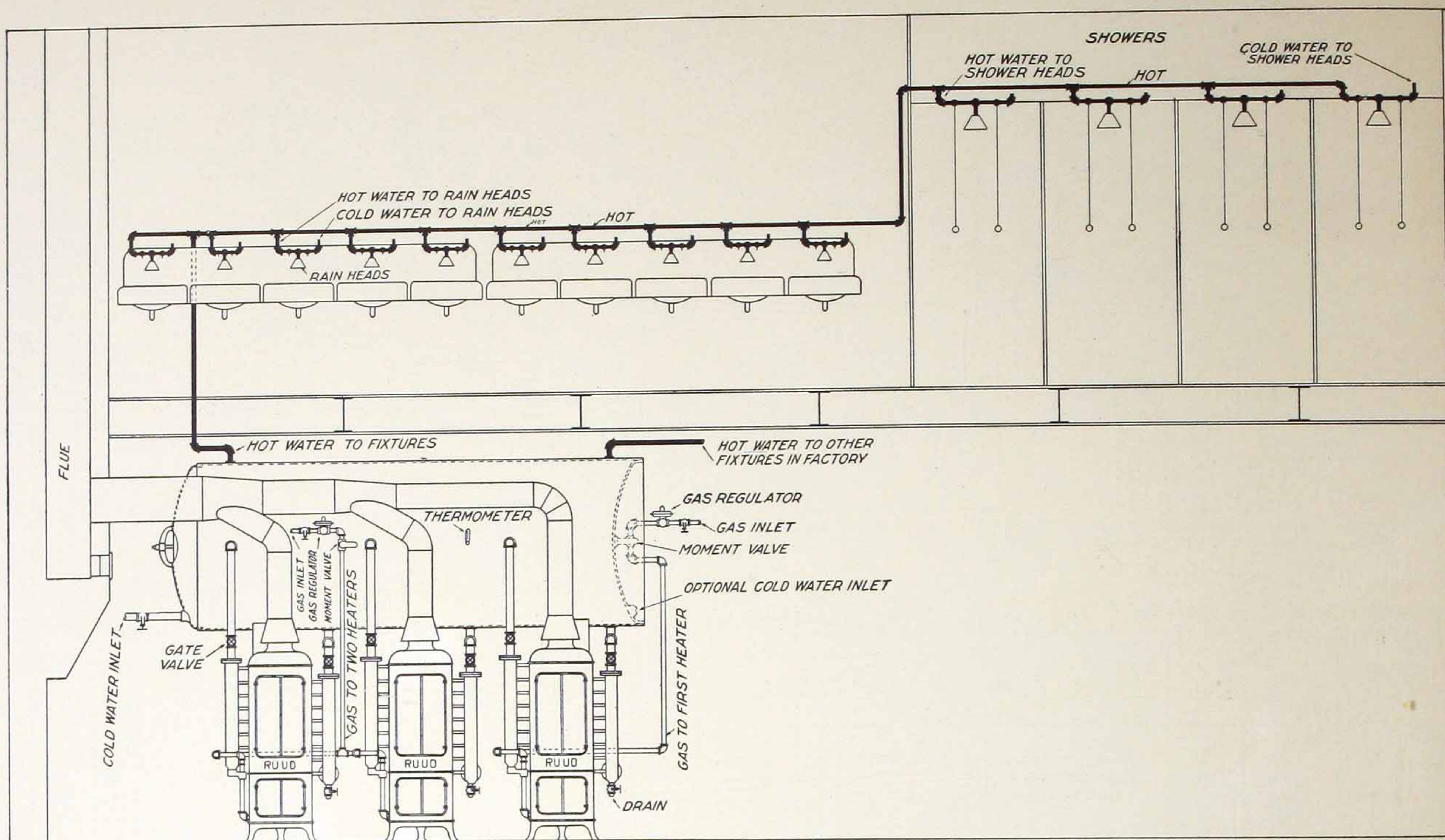


Ruud Multi-Coil Automatic Storage System installed in apartment building



Ruud Multi-Coil Automatic System installed on direct system of plumbing, water supplied under pressure of pneumatic tank





## Ruud Multi-Coil Automatic Storage System Installed in a Factory

Three Ruud Multi-Coil Heaters are here connected to tank to supply hot water for a factory. Ruud Heaters can be installed in batteries in any number to supply any hot water need, no matter how large.

In this and the other illustrations given, are shown the usual method of assembling the system. Should specific conditions make it desirable, many variations of these standard assemblies may be made.

In designing installations different from those shown, it is necessary to consider only those principles of hot water generation and circulation common to any hot water apparatus of the circulatory or storage type.

Our service and advice are freely offered, should they be desired.



## RUUD TANK WATER HEATERS



**Ruud Double Coil Tank Heater**



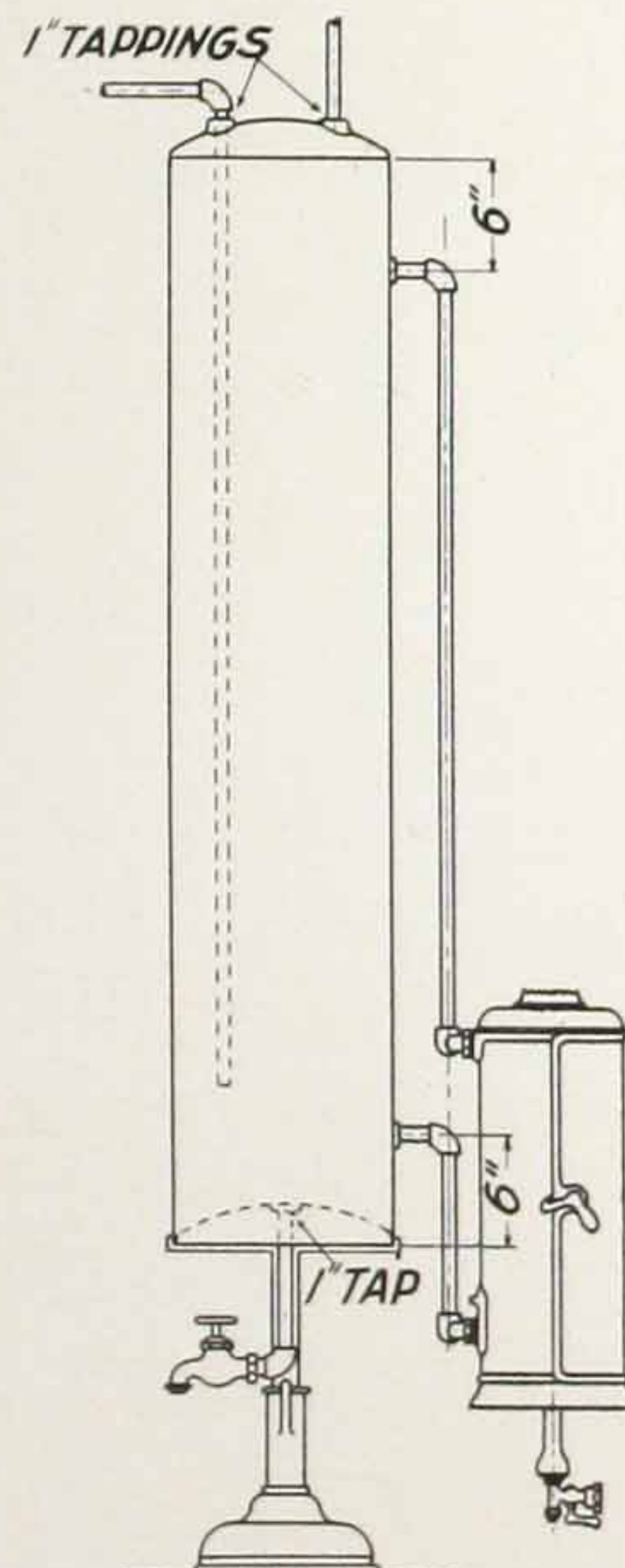
**Ruud Double Coil Tank Heater**  
 Gray Porcelain Enamel Model



**Ruud Triple Coil Tank Heater**

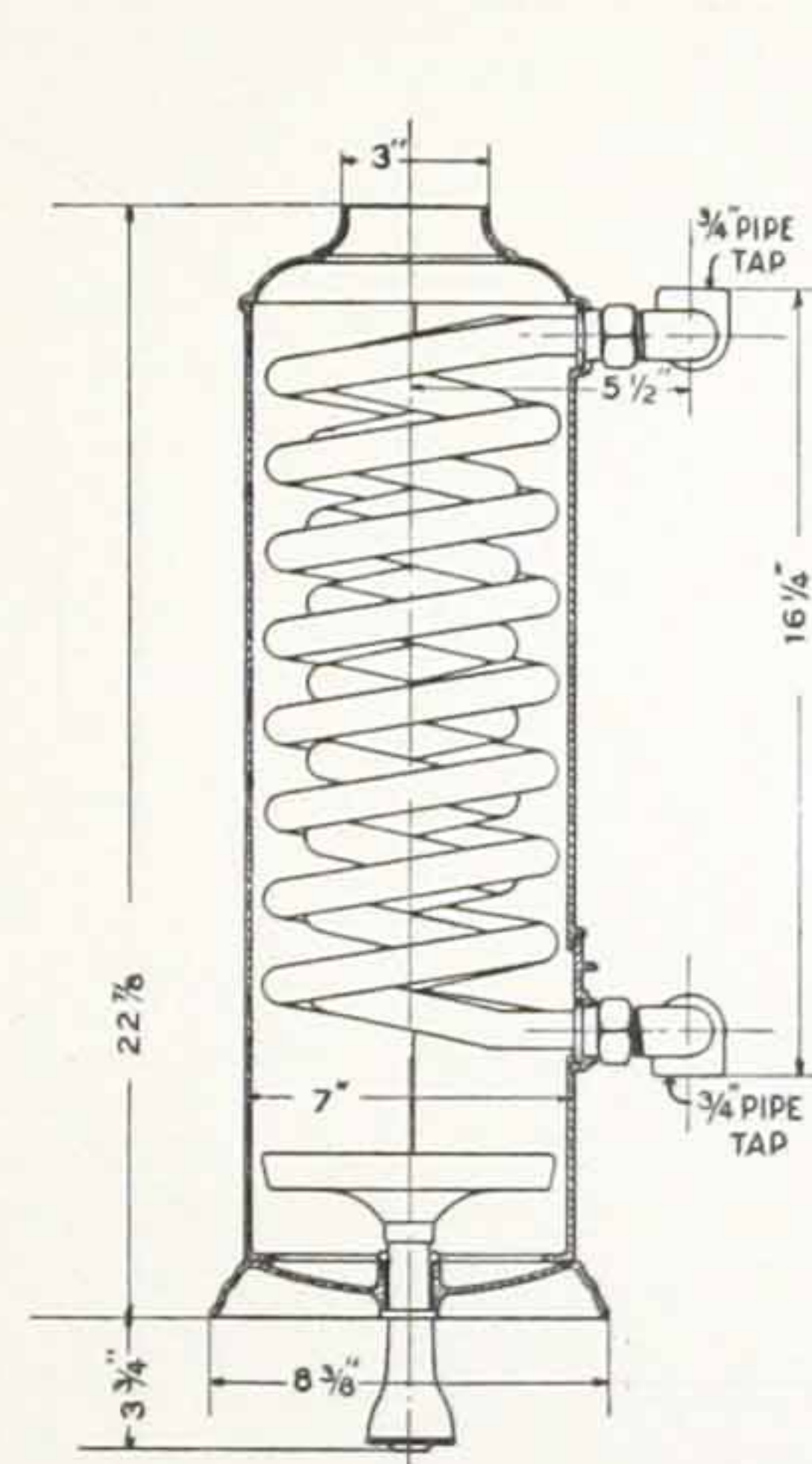
Ruud Tank Water Heaters have many exclusive features. Exterior manifolds, which are reversible and interchangeable and to which the coils are joined, carry the entire weight of the heater by reason of an ingenious device on the union sleeve which at the same time holds the shell rigid. Centered inlets and outlets permit the heater to swing on an axis, hence its position may be changed with very little trouble.

Coils and burner are instantly accessible, and the copper coils are so placed and graded as to absorb the greatest amount of heat possible. The cast iron ring-burner is mounted on a mixing tube with an adjustable air shutter. Gas orifices are drilled in perfect alignment and at perfectly proportioned distances on the radial ridges which are cast on the flat upper surface of the burner. This assures perfect combustion.

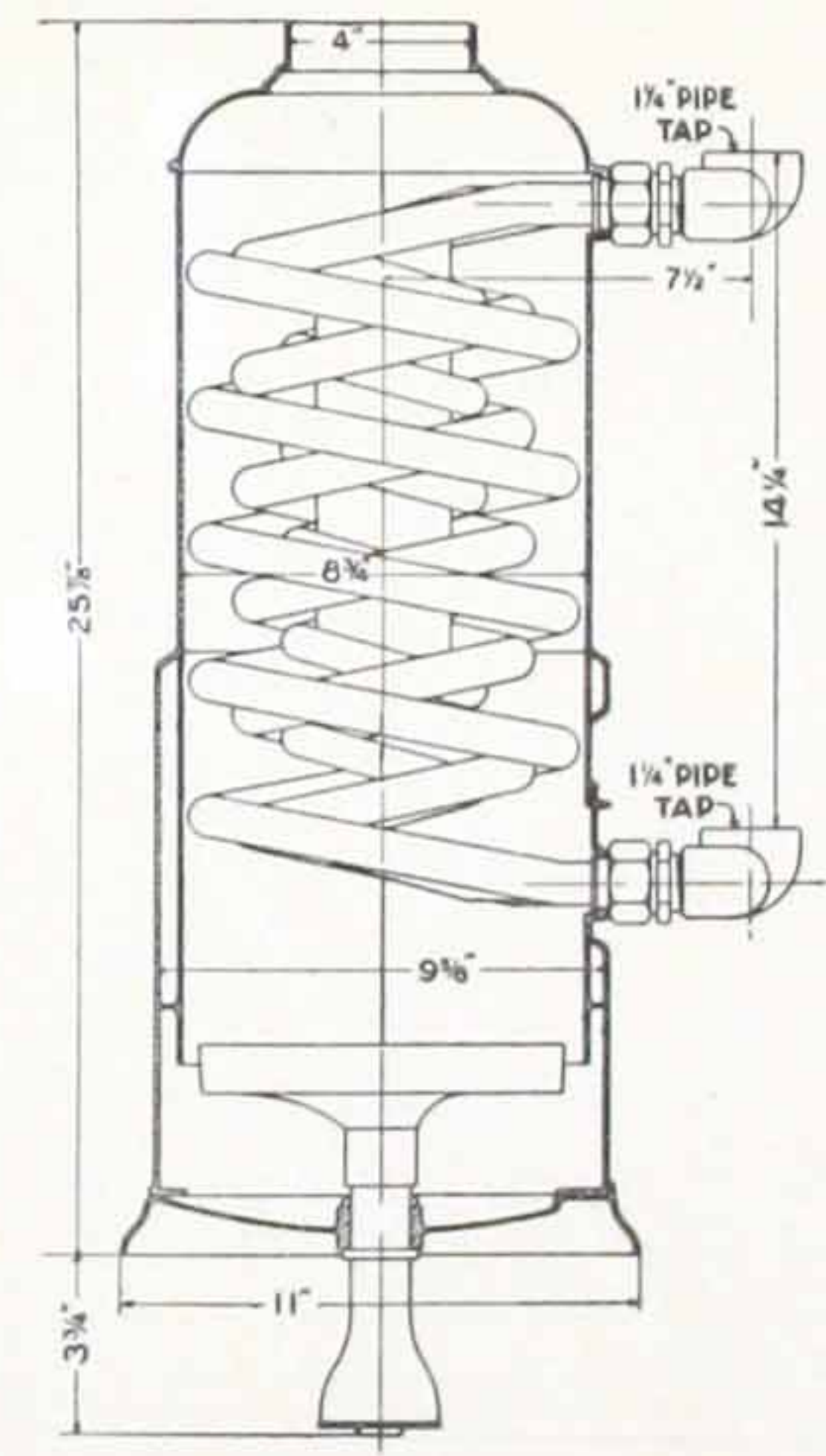


**Ruud Tank Heater Installed**  
 Illustrating the standard method of connecting

Note absence of unions in piping. Unions on heater manifolds serve the purpose, giving economy in installation and maintenance. Also note the centered inlet and outlet, which permit the heater to swing on an axis.



No. 25



No. 35

**Table of Dimensions, Weights, Etc.**

Size of Heater	For Size Tank	Diam. of Coil	Height	Diam.	Net Wt.	Wt. Crated
No. 25 Black Japan Finish	30-40	3/4"	22 7/8"	7"	35 lbs.	45 lbs.
No. 25 Gray Porcelain Enamel Finish	30-40	3/4"	22 7/8"	7"	38 lbs.	47 lbs.
No. 35	40-60	3/4"-7/8"	25 7/8"	9 5/8"	71 lbs.	95 lbs.

NOTE—The No. 35 is equipped with Triple Coil.

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**Ruud Manufacturing Company, Pittsburgh, Pa.**

Branches Everywhere

### BULLETINS

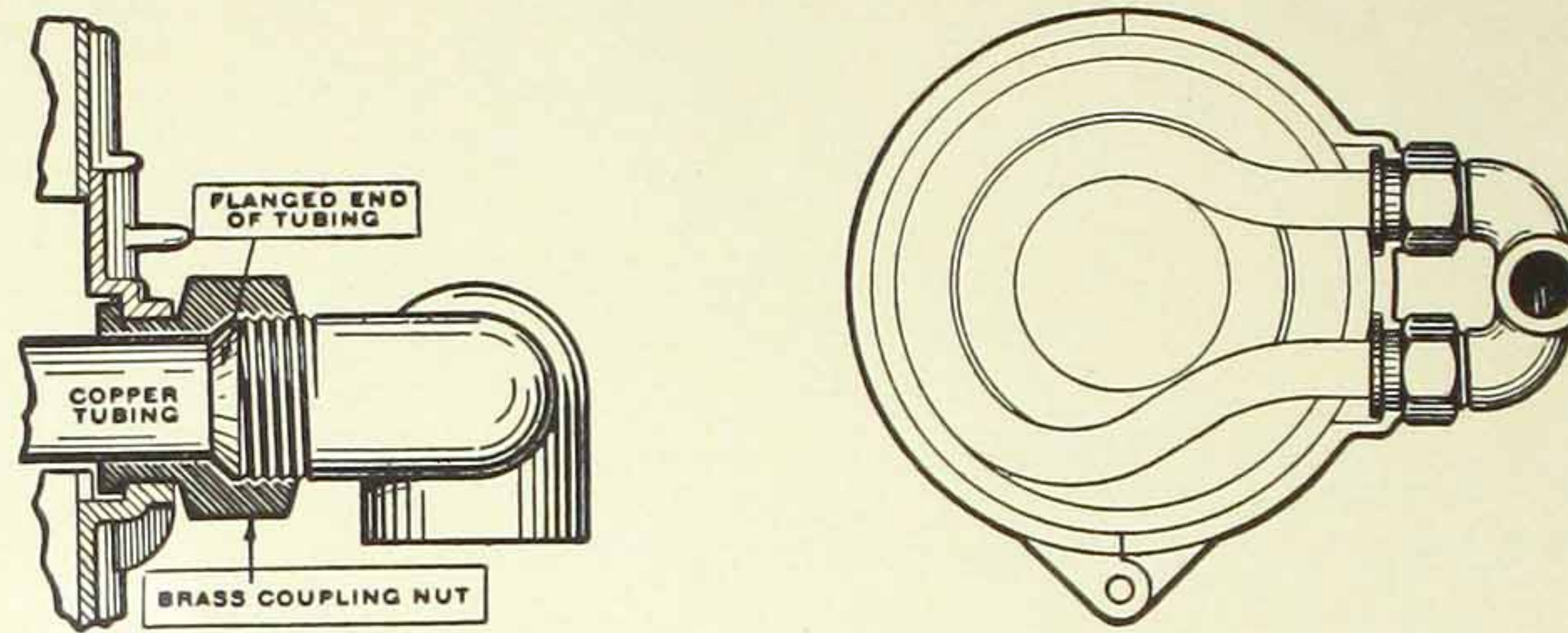
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4. Ruud Multi-Coil Automatic Storage Systems.
5. Ruud Tank Water Heaters.

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### Model Specification

Furnish and install one No. .... Ruud Tank Water Heater, as made by Ruud Manufacturing Company, Pittsburgh, Pa. Connect heater to tank shown on plans, using ..... inch (galvanized iron or brass) pipe.



**Illustrating the Ruud Patented Combined Coil Joint and Detachable Reversible Union**

Note how flange of nut automatically locks coil to heater shell.

### Twenty-five Outstanding Features in a Ruud

- |   |   |
|---|---|
| 1 Full length heavy seamless copper tubing.                   | 14 Fifty to sixty-five feet per hour.   |
| 2 Two independent removable coils.                            | 15 Elevated radial ridges on burner.  |
| 3 Coils joined in brass manifolds.                            | 16 Every hole placed correctly and evenly drilled.                                |
| 4 No brazed joints.   | 17 Perfect secondary air supply.  |
| 5 No stoppage from spelter runs.                              | 18 Burner engaged on machined end of mixer always level.                          |
| 6 No weakened burned tube.                                    | 19 No cotter pins; no set screws.   |
| 7 Coils wound with reverse grade.                             | 20 Burner easily removed for cleaning or inspection.                              |
| 8 Better circulation.   | 21 Offset hinges; gravity latch.  |
| 9 Quicker heating.  | 22 Supplied with needle adjustment or straight-on gas cock with lock-nut shutter. |
| 10 Reversible union, ground joint couplings.                  | 23 Superior design and finish.  |
| 11 Two unions saved in the water line.                        | 24 Ruud standard workmanship and material.  |
| 12 Inlet and outlet being centered, heater swings on an axis. | 25 Saving at both ends; installation and maintenance.                             |
| 13 Quick-acting burner.                                       |   |